The OIL WEEKLY

A Journal for
Oil and Gas Producers and Field Men

HOUSTON
LOS ANGELES
PITTSBURGH
FT. WORTH
TULSA
CHICAGO

Vol. 32. No. 11 MARCH 8, 1924 10 Cents Per Copy

"Our Mistake"

We have made the statement that Hughes Tool Joints

"Cost No More But DO Last Longer"

What we should have said is

Hughes Tool Joints Cost YOU No More---

But DO Last Longer

—The Special Select Steel used.
The care and thoroughness in manufacture
The facilities for proper manufacture.
The "advanced" heat treating methods.
The double inspection and testing.

All Enter into the Cost of Manufacture, but our Extra costs are YOUR profits

Hughes Tool Joints cost you no more but do last longer

Hughes Tool Co.

Houston, Texas :-: Los Angeles, Calif.

AMERICAN STEEL DERRICK

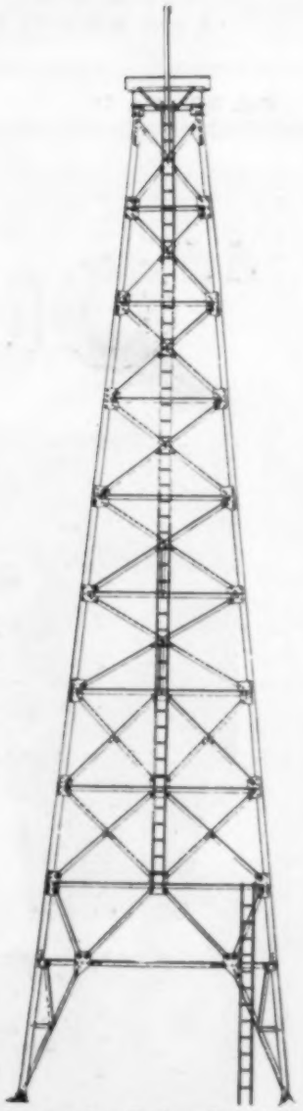
On Teapot Dome

They Stand the Gaff

American Steel Derricks have been specified by the Mammoth Oil Company for use on their Teapot Dome lease in Wyoming. The initial order from this company was for fifty 64-foot galvanized American Steel Derricks and was placed after a careful investigation of the merits of the various designs of steel derricks now on the market.

In the sixteen months that the American Steel Derrick has been on the market several of the largest Oil Companies in the United States have specified the American as standard equipment.

The American Steel Derrick combines the features of Design, Strength and Price. A word from you will give us an opportunity to prove it.



The American Design—Sizes 64 ft., 74 ft., 84 ft., 114 ft. Painted or Galvanized

American Steel Bull Wheels—Doreco Low Pressure Gas Burner—Twin City Tractor Hoist

AMERICAN STEEL RIG & REEL CO.

Tulsa, Oklahoma

THE OIL WEEKLY. Issued weekly by the Gulf Publishing Co., 1716 Dallas Ave., Houston, Texas. Subscription price $1.00 per year; 10 cents per copy. Entered as second-class mail matter December 23, 1916, at the post office at Houston, Texas, under act of March 3, 1879.

TITUSVILLE twin cylinder drilling engines

SEVERE tests—where the drilling is deepest and hardest—have proven the worth of the TITUSVILLE TWIN CYLINDER ENGINE to the driller who appreciates and must have a reserve power that is instantly responsive to the need plus the utmost flexibility. The engine has a rugged construction throughout that embraces the most modern refinements of engine manufacture, one instance of which is the easily operated reverse lever that lifts the link from the top.

Their records of up-keep and economy of operation are unsurpassed.

The engine illustrated below is equipped with THE TITUSVILLE CHAIN TIGHTENER attachment which makes it EASY to keep the drive chain or belt at just the right tension. To adjust, it is only necessary to loosen the foundation bolts and tighten the front strap nuts, moving the whole engine forward to take up slack—no idlers required.

Write for Bulletin.

The Titusville Iron Works Company
TITUSVILLE, PENNA.

TITUSVILLE EQUIPMENT INCLUDES:

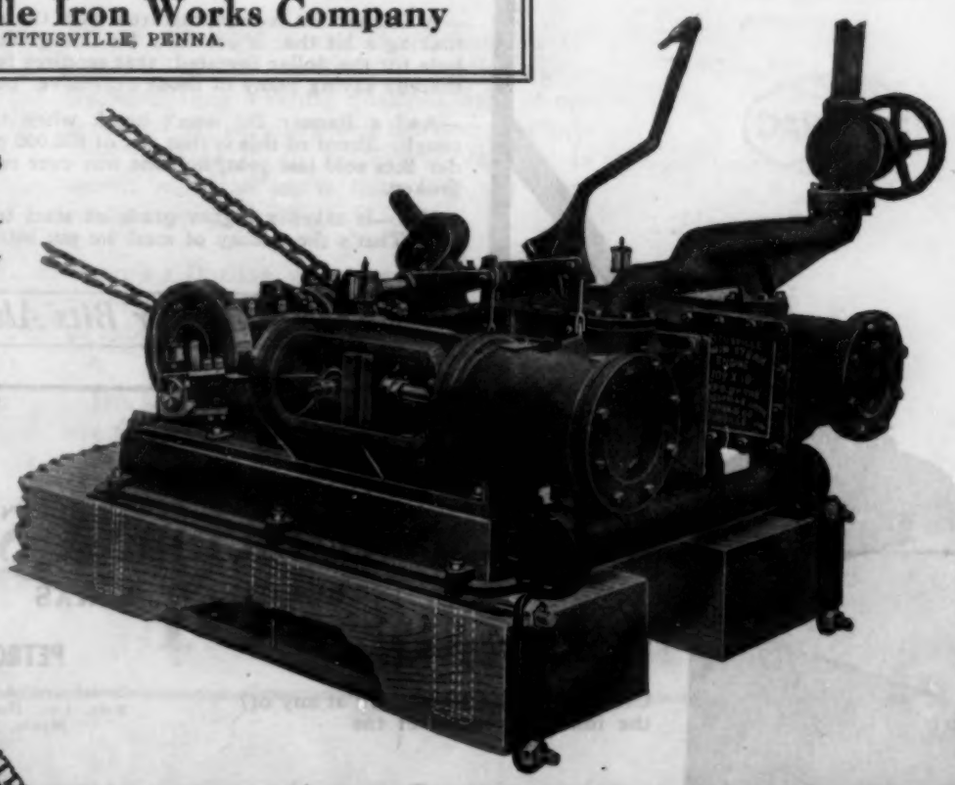
Rotary Machines, Draw Works, Swivels, Twin Cylinder Engines, Slush Pumps, Oil Field Boilers, Crown Blocks, Tico, J. C. and Olin Gas Engines.

AFFILIATED COMPANIES FOR DISTRIBUTION

For MID-CONTINENT, COASTAL and WESTERN FIELDS:
The Continental Supply Company

For CALIFORNIA:
The Republic Supply Company of California

For EXPORT:
The Continental Well Supply Company, 2 Rector St., New York City



TITUSVILLE OIL COUNTRY MACHINERY
BUILT WITH RESERVE RUGGEDNESS

HOW DO YOU BUY BITS?

LOOK FOR THE RED BANNER

Banner Bits

are bought for what they do

—You say everyone makes a fish tail bit? They do—but we are the only ones making a Banner Bit.

—What's the difference?

—A Banner Bit is manufactured with the one purpose of making a bit that is better; a bit that gives you the most hole for the dollar invested; that requires fewer dressings, thereby saving many of those expensive "pull outs."

—And a Banner Bit won't break when the going gets rough. Proof of this is that out of 600,000 pounds of Banner Bits sold last year, not one was ever reported to have broken.

—Yes,—it takes a higher grade of steel to make such a bit. That's the quality of steel we put into every Banner Bit.

Specify Banner Bits Always

Gulf Coast Machine & Supply Co.

BEAUMONT, TEXAS

"GULFCO" Products

Can now be had from stock at any of the following stores of the

PETROLEUM SUPPLY CO.

Smackover, Ark.; El Dorado, Ark.; Shreveport, La.; Houston, Texas; Norphlet, Ark.; Mexia, Texas; Corsicana, Texas

There's A Vast Difference

COST per year—not price per valve—is the buying basis that spells true valve economy. Not when the order is placed but only after the test of time can you honestly say that a gate valve costs little or much.

In the oil fields, on the pipe lines, in the refineries—men are still paying for valves which were bought at the time the wells were drilled or the pipe lines laid. They are paying for the inability of those gate valves to stand up against frequent opening and closing—paying for time consuming difficulties of operating—paying for delay in repairing and securing repair parts.

Darling Parallel Seat Gate Valves are famous in oil and gas fields for their simplicity, their long wearing qualities, ease of operation. While users will tell you they seldom need to touch a Darling Valve it is worth while to know that they are most easily repaired in the field.

There's a Darling Valve for every place and purpose. Diagrams of construction as well as catalogs will be gladly sent on request.

There's a Darling Valve for every drilling, pipe line and refining condition.

DARLING

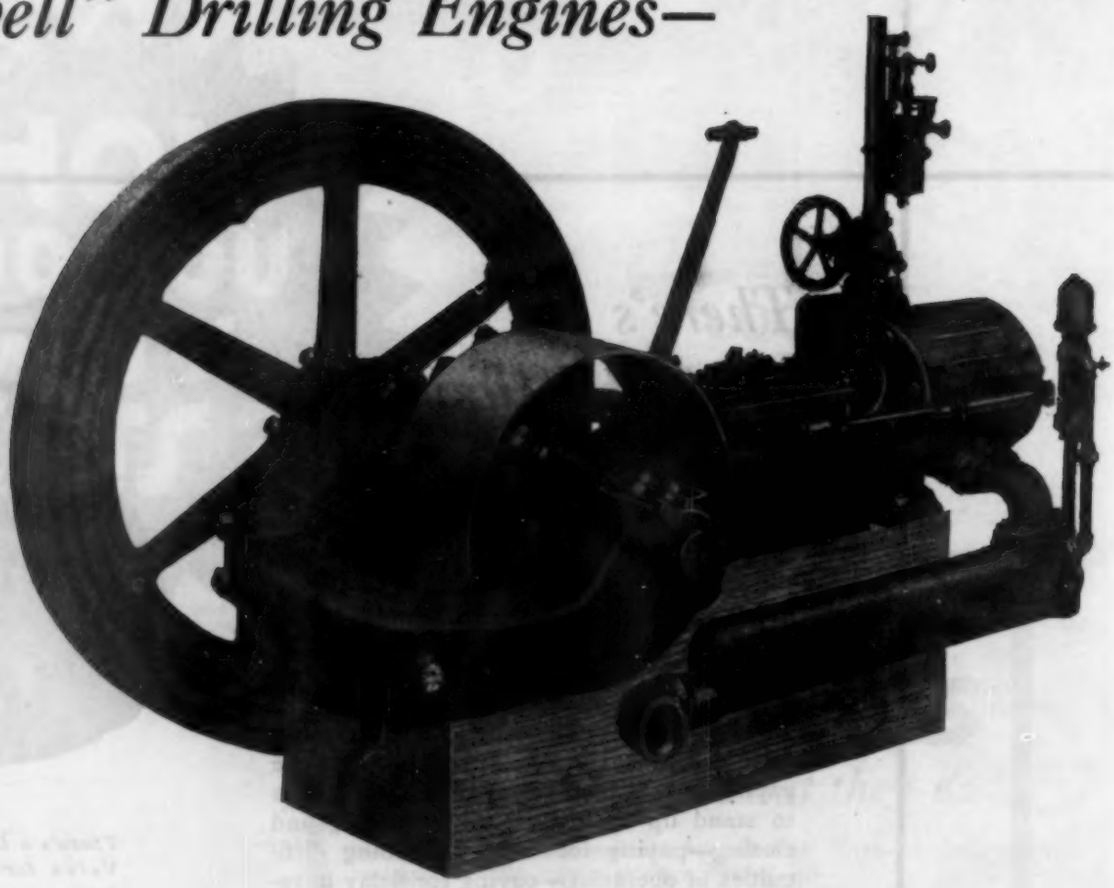
DARLING VALVE & MFG. CO.

New York Main Office: Williamsport, Pa. Chicago

Mid-Continent District Sales Managers:
Mr Earl J. Connelly, 413-414 First National Bank Bldg., Oklahoma City, Okla.
Mr. Frank Cavenagh, 313 West Building, Houston, Texas

DARLING GATE VALVES

"Oilwell" Drilling Engines—



The Modern 'Oilwell' Drilling Engine is the outcome of long experience because 'Oil' and 'Oilwell' have grown up together."

The Outboard Bearing

The large bearing surfaces of wearing parts, together with its sturdiness and positive manner of lubrication, have given the "Oilwell" Drilling Engine its world wide reputation for durability and reliability.

As drilling has become more severe, due to increased depth of wells and in consequence heavier strings of tools to be handled, we have strengthened the engine shaft to meet these conditions by furnishing an outboard bearing as illustrated above.

Its construction is such that a belt, already clamped together, can be put on the engine pulley without removing any part of the outboard bearing.

"OILWELL" ESTD. 1862. TRADE MARK. (REGISTERED)

OIL WELL SUPPLY CO.

PITTSBURGH, U. S. A.

New York San Francisco Los Angeles
Tampico London

OILWELL SUPPLY CO

World's Largest Manufacturers of Oil Field Equipment

Say you saw it in The Oil Weekly

INDEX TO ADVERTISERS

A

Ajax Iron Works 28
Alamo Iron Works..... 68
American Cable Company..... *
American Steel Rig & Reel Co.. .....Inside Front Cover
American Well & Pros. Co.....25
Axelson Machine Company.....17
American Tank Company..... *

B

Baker Casing Shoe Company...70
Barnickel, Wm. S., & Co.....68
Baash-Ross Tool Company.....39
Beaumont Well Works Co.....69
Bessemer Gas Engine Company .....Inside Back Cover
Bevers-Way Drilling Company.. *
Bierman, Alfred C.....71
Black, Sivalls & Bryson, Inc...63
Black, C. N. 71
Boykin Machinery & Supply Co.53
Braden Company, The..... *
Bradford Motor Works.....48
Bridgeport Machine Company.. .....Back Cover
Brownell Company, The..... *
Brown Welding & Machine Co..55
Buckeye Traction Ditcher Co... *
Burns Tool Company.....60
Butler Manufacturing Company. *
Byers, A. M., Company..... *

C

Cameron Iron Works..... *
Caudill, S. J. 71
Clark Machine Company..... *
Columbian Steel Tank Company. *
Commercial National Bank.....60
Continental Supply Company... *
Connolly Agency, D. F..... *
Coste, E., & Co.....71
Cosden & Co.....64
Colonial Steel Company..... *
Commonwealth Pipe & Sup. Co..69
Crain Ready-Cut House Co..... *
Cunningham Company ..... *

D

Darling Valve Mfg. Co..... 5
Davis & Kuhns.....52
Deane, Early ..... *
Deep Well Engineering Co..... *
De La Vergne Machine Co..... *
Detlor, W. Edson..... *
D. & B. Pump & Supply Co....79
Deussen, Alexander 71
Donoghue, David 71
Dunn Manufacturing Company..20
Elliott Core Drilling Company.. *

E

Exchange Banks of Tulsa..... *
Exner-Dodge Packer Company.. *

F

Federal Electric Company..... *
Foamite-Childs Corporation .... *
Foster-Hoefer Corporation 8
Fort Worth Laboratories.....70
Foster & Reiter.....71
Foxboro Company, Inc.....68
Franklin Valveless Engine Co.. *
F. W. Freeborn Engineering Corporation 70
Frick-Reed Supply Company....34

G

Gantz Tank Company..... *
Gaso Pump & Burner Mfg. Co..51
Ged Iron Works..... *
Gott, H. P., Manufacturing Co.. *
Gould Burner Company.....58
Graver Corporation ..... *
Guiberson Corporation 59
Gulf Coast Mach. & Supply Co.. 4
Gulf Refining Company.....73
Gulf Publishing Company.....82

H

Hall, L. M. 71
Hardway & Cathey.....71
Harrisburg Pipe & Pipe Bending Company ..... *
Harrisburg Pipe & Pipe Bending Company of Texas..... *
Heitmann, F. W., Company....69
Herald Brothers ..... *
Heydrick Mapping Company....70
Hirsch & Hannay.....71
Hope Engineering & Supply Co.52
Hopkins, Edwin B.....71
Hough Mfg. Co., Chas. N.....61
Houston Oil Field Material Co..69
Hughes Tool Co.....Front Cover
Humble Oil & Refining Co..... *

I

Imperial Brass Mfg. Co..... *
International Supply Company.. *
International Derrick & Equipment Company ..... *

J

Jenson Bros. Mfg. Company.... *
Jones Company, S. M. ..... *

K

Kansas City Hay Press Co.....44
Kansas City Structural Steel Co. *
Keystone Pipe & Supply Co....68

K—Continued

Keystone Driller Company.....43
Kuehnle, Erick F.....71

L

Layne & Bowler.....80
Leader Company, The..... *
Lockett, A. M., & Co..... *
Lucey Manufacturing Co.....61
Ludlow Valve Mfg. Corp..... *
Lufkin Foundry & Machine Co.. 7

M

Maloney Tank Mfg. Company..42
Matson, George C. 71
J. H. McEvoy & Co.....26
McGregor Working Barrel Company, Inc. ..... *
Moore, Lee C., & Co., Inc.....54
Myrick Machine Company..... *

N

National Supply Companies.....74
National Transit Pump & Machine Company 10
National Turnbuckle Derrick Co. *

O

O'Bannon, Walter, Company....62
Oil Conservation Engineering Co. *
Oil City Iron Works..... *
Oilfield Salvage Company.....69
Oil Well Supply Company..... 6
Oil Well Service Company.....69
Osage Agency 66
Owen, L. H. 71

P

Palmer Specialty Company..... *
Parkersburg Rig & Reel Co....67
Peden Iron & Steel Company..72
Pelican Well Tool & Supply Co. *
Pennsylvania Tank Car Co..... *
Petroleum Rectifying Co.....30
Petroleum Supply Company.....68
Petroleum Iron Works..... *
Pioneer Tank & Boiler Co..... *
Pittsburgh Reinforced Brazing & Machine Company ..... *
Prentiss Vise Company..... *

R

Ratigan, J. P. ..... *
Reading Iron Company.....36
Reading Steel Casting Co..... *
Regan Forge & Engineering Co.23
Republic Supply Company..... *
Rhode Island Fittings Co..... *
Ring, Dewitt T. 71

R—Continued

Robinson Packer Company..... *
Rock Island Plow Company.... *
Rotary Disc Bit Company..... *
Rossendale Reddaway Belting & Hose . ..... *

S

Safety Pulling Machine Co.....41
Schofield, D. L. ..... *
Sinclair Refining Company.....19
Southern Engine & Pump Co.. *
Southern Engineering Sup. Co..70
Southern Brass Mfg. Co.....69
Southwest General Electric Co.. *
Spence, H. M. 58
Spengler Core Drilling Co.....32
Stanley Belting Company..... *
Standard Seamless Tube Co....40
Standard Engineering Co.....48
Standard Blue Print Map & Eng. Company 70
Stanley Belt Company..... *
Stone, Jesse R. 71
Sullivan Machinery Company...40
Sunshine State Oil & Ref. Co...66
Superior Tube Company.....78

T

Texas Oil Pump Company..... *
Texas Pipe & Supply Co.....69
Texas Petroleum Bureau.....70
The Titusville Forge Company..77
The Titusville Iron Works..... 3
Trumble Gas Trap Company.... *
Tucker, Jas. I., Company.....71
Tulsa Boiler & Sheet Iron Works *
Tulsa Rig Reel & Mfg. Co..... *

U

United Iron Works..... *

V

Vinson, Elkins & Wood.....71
Voorhees Rubber Mfg. Co.....12

W

Webster, C. W. ..... *
Westcott Valve Co., Inc..... *
Western Machinery Company...31
Westinghouse Electric Mfg. Co. *
Williams, F. N. 71
Williamsport Wire Rope Co.... *
Wilson-Broach Company ..... *
Wilson & Willard Manufacturing Company 64
Wyatt Metal & Boiler Works...44
W-K-M Company ..... *

*Printed in one or more issues of each month.

GUIDE FOR PURCHASERS ON PAGES 81-82

Erecting and testing Lufkin-Taylor Rotaries in one corner of our shop. They run so easy on the roller and ball bearings a three horsepower motor will make them spin. The Lufkin-Taylor Rotary runs with less friction than any machine of its kind known. Let us send you our bulletin No. 70, which explains why.

Lufkin Foundry & Machine Co., Lufkin, Texas

A. J. Carr, Sales Agent, Lufkin, Texas

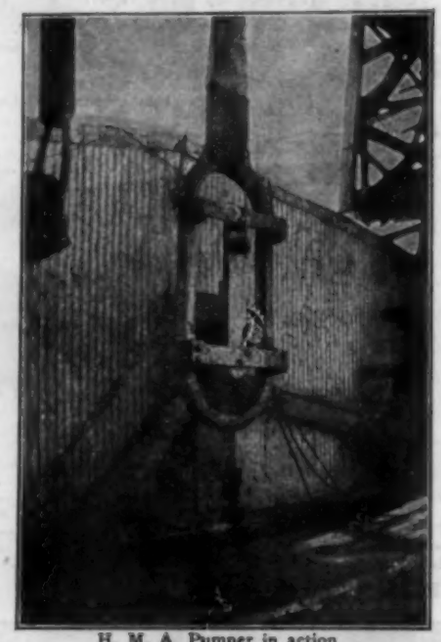
We Combed the Field

—*and found one of the most valuable improvements in the industry*

Gives 5 to 10 foot pumping stroke without rebuilding pumping rig

Saves one-third to one-half the pumping power

Gives from 25% to 500% more fluid



H. M. A. Pumper in action

Handles 5-inch or 6-inch pumping barrel as easily as 2-inch

Eliminates rod troubles

Used by the biggest producers

Absolutely guaranteed

The Foster-Hoefer Corporation was organized to introduce improved methods in oil production, and among our primary aims is that of promoting the practice of long-stroke pumping.

Long-stroke pumping is today in its infancy, but it is very rapidly coming into its own. Our company made a most thorough investigation of all the methods and devices which are being used to obtain a long pumping stroke. We found the H. M. A. Geared Long-Stroke Pumper to be not only a perfectly efficient device for this purpose, but the only really practical device in its field. Our company has become exclusive distributor of this pumper throughout a wide territory.

The H. M. A. Geared Long-Stroke Pumper
5 to 10 Foot Pumping Stroke

This pumper has been adopted by a number of the largest producers in the industry—such companies as Gypsy, Waite-Phillips, and Carter. With its use, increases in production as high as 500% are not uncommon, while pumping grief and costs are cut in an astonishing degree. Standard pumping rigs are instantly converted to long-stroke, without rebuilding the rigs.

Hancock Anti-Sand Working Barrel
Permits 10-foot Pumping Stroke

As a logical companion piece we have also made arrangements to take over the Hancock Working Barrel, which is the only anti-sand working barrel as yet manufactured in a size which will accommodate a 10-foot pumping stroke. This barrel has met with a world-wide success, over 3,000 being now in use.

Its sand capacity is 5 times that of any other barrel on the market, and its durability is exceptional.

Our company may be considered specialists on long-stroke pumping practice. Write us about your problems.

Hancock Anti-Sand Working Barrel

Foster-Hoefer Corporation

Improved Methods in Oil and Gas Production

419 Wright Bldg., Tulsa, Okla.

Texas Representative: E. C. Kirby, Corsicana, Texas

"Foster-Hoefer Corporation Believes That if a Man Needs a Thing He Pays for It Whether He Buys it or Not."

©CIB611467
MAR 10 1924

THE OIL WEEKLY

An International Oil Publication for Oil and Gas Producers

Copyright 1924 by the Gulf Publishing Company

MEMBER AUDIT BUREAU OF CIRCULATION

Established 1916

HOME OFFICE—Houston, 1716 Dallas Ave.
FORT WORTH—212 W. T. Waggoner Bldg.
TULSA—325 Atco Bldg.

Published weekly by
Gulf Publishing Company
HOUSTON, TEXAS
R. L. DUDLEY, EDITOR AND MANAGER

PITTSBURGH—1507 First Nat'l Bank Bldg.
CHICAGO—453 First National Bank Bldg.
LOS ANGELES—1201 Haas Bldg.

Vol. 32 SATURDAY, MARCH 8, 1924 No. 11

In this issue.

Production Off

Average daily production of United States fields for last week shows a loss of approximately 25,000 barrels. Production table by districts on page 38.

Mexico Going Down

Is the decline of production in the fields of Mexico to be as spectacular as was the rise? This question is discussed in Mr. McTee's article beginning on page 21.

California Off

Production in California is more than 20,000 barrels below the amount reported last week. This drop has come about in spite of the fact that two new fields have been proved in the Los Angeles basin during past two weeks. Page 37.

Oklahoma Active

Field statistics for Oklahoma during the week closed shows an increase in drilling wells and completions. Figures for the state show a decline in production of approximately 4000 barrels. Burbank is not coming up to expectations. Page 41.

Corsicana-Powell

Completion of three large producers from the Woodbine sand as a result of deeper drilling has resulted in a number of operators attempting to deepen wells. Production of the field is up about 8000 barrels this week. Page 45.

Cotton Valley

Completion of two additional tests as gassers in the Cotton Valley area of Louisiana have added mystery to the prospects of the district. One of the gas wells is an offset to the commercial well. Operators are watching the gassers in the hope that they may make producers later on. Page 46.

High Speed Rotary

Mr. Pennington tells of the advantage of high speed in drilling and tells how some obstacles may be overcome. Page 29.

Industry Not on Trial

Paul Shoup tells the advertising men of Los Angeles some things that the public should know about the oil business, and the suggestion is that others should talk to luncheon clubs. Page 11.

Regular Features

	Page
Crude Oil Market	16-18
Corsicana	45
Field Notes Begin	37
Louisiana Fields	46
Manufacturer and Supply Dealers Notes	72
New Equipment	75
North Central Texas	43
Paul Peebles Letters	76
Permits to Drill	55
Personals	35
Production Tables	38
"Squeaks"	79
U. S. Completions Begin	49
West Coast	37
Wildcats	57-66

KEY TO ABBREVIATIONS

Following is the explanation of abbreviations and signs used in drilling reports, completions, etc.: *—dry, abandoned well; ‡—salt water; †—junked and abandoned; ¶—million cubic feet of gas; abn—abandoned; bbls—barrels; b. s.—basic sediment; cas—casing; co—cleaning out; dk—derrick; dr—drilling; fsh—fishing; ft—feet; in—inches; lcn—location; m—milling; N. S. E. W.—North, South, East, West; r—reaming; sd—shut down; sdtr—sidetracking; sp—spudded; sr—straight reaming; std—standardizing; sw—salt water; td—total depth; ur—under reaming; wo—workover; wosr—waiting on standard rig.

Not So Good

The much discussed Trenton producer drilled last fall by the Glenwood Natural Gas Company in the Ontario field has been put on the beam and is not making more than 20 barrels a day. This is much less than had been anticipated from the well. Page 47.

The Big Show

Construction work has started on permanent quarters for the International Petroleum Exposition in Tulsa. An ideal location has been secured and comprehensive plans are being worked out to make the site as attractive and convenient as possible. Page 56.

East Texas

Acreage along the Balcones-Mexia fault in East Central Texas is coming in for a lot of prospecting this spring. Considerable activity is already under way and tests are going down in several counties. Optimism is high as to the chances of finding big production similar to that of Corsicana and Mexia. Page 57.

Archer County Leads

Archer County is still leading all districts in Texas in the amount of activity going on. Reports on March 1 showed 114 tests actively under way. Production for this area is up more than 10,000 barrels this week. Page 43.

Pipe Specifications

Report of committee of A. P. I. on standardization of steel and iron pipe. Page 14.

Eastern States

Snow and rain have checked work in Eastern fields temporarily. However, plans are being made for extensive operations as soon as weather conditions are favorable. Page 47.

SUBSCRIPTION RATES
One Year....$1.00 The Copy....$ .10 Foreign Subscription....$2.00

ADVERTISING RATES
on application. Accounts payable to GULF PUBLISHING CO.

Transit Pumps

General Service Type

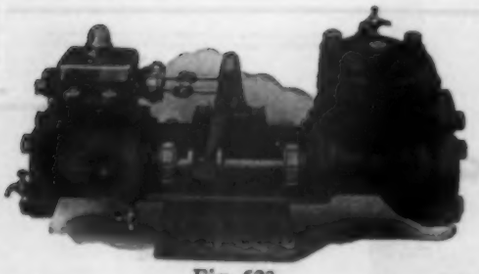


Fig. 623
Size 3 x 2 x 3

For 200 pounds Working Pressure

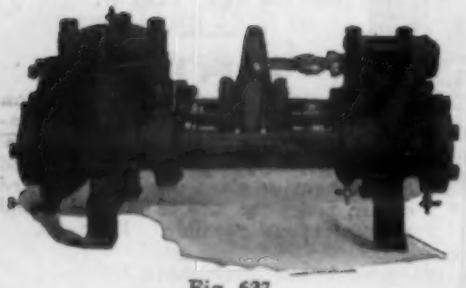


Fig. 627
Size 6 x 4 x 6

Contain the same quality and careful workmanship found in their largest pipe line pumps.

An acquaintance with one type intimates what to expect of another type, because quality goes r i g h t straight through the entire line.

If you occasionally require pumps in a hurry our Monthly Bulletin—"Pumps and Engines in Stock"—lists what we have available for immediate shipment from our warehouse located near the principal oil fields. Of course, it's gratis.

NATIONAL TRANSIT
Pump & Machine Company

OIL CITY, PA.

District Offices

Kansas City Houston Denver New York Philadelphia Pittsburgh Cleveland

"Interference Would Stifle Industry"—Shoup

California oil man gives facts setting public right on oil industry; business not on trial at Washington

Los Angeles, Cal., March 4.—The oil industry is not now on trial at Washington but the necessity of freedom of action is becoming more and more apparent. Less interference from those who have no responsibility either for the volume of production or for the wealth that is to be jeopardized in finding that production were the keynotes of the address delivered today before the Advertising Club of Los Angeles by Paul Shoup, president of the Associated and Pacific Oil Companies, vice president of the Southern Pacific Railway Company and president of the Pacific Electric Company.

His subject was "The Influence of the Petroleum Industry on the Prosperity of the Country, Especially on California."

He spoke as follows:

"The oil industry has been occupying the first page of the daily press for a considerable period of time. The demonstration has been conclusive that under certain conditions and circumstances, failure to advertise may be quite an advantage but publicity is not to be escaped and even in this maelstrom, we find a conclusive demonstration of the power of publicity. Oil companies appreciate the value of good advertising. Their products have been carried swiftly to the consumers largely through the co-operation of the great constructive effort in making things worth while known.

"It is not my purpose to discuss the situation at Washington. No American citizen can feel otherwise than that the truth, whatever it may be, should be brought forth and prevail. And the great oil industry of this country, I know, stands back of that view; but in the light of that statement it must likewise be true that partisan politics or personal animosities or political hysteria or rivalries between factions of any kind seeking power should not have controlling voices in this sad situation. It should be dealt with from the viewpoint of American citizens as a whole seeking in this sad situation only right and justice.

"The investigations at Washington have served to concentrate once again attention upon the industry. Those who have sought and who continue to seek through political channels control without financial responsibility of the great industries of this country hope to find access to power in the present situation. They would regulate oil as they do the railroads and fix the prices for its commodities by dictum of a commission.

"It is therefore perhaps opportune at this time briefly to discuss the relations of the oil industry in America to the great public that it serves, and to point out the inherent difficulties in connection with any form of public control and as well the lack of necessity for any regulation that is not applied to business at large.

"Always, legislation of a specific nature, singling out one industry, from another, has its defects and its dangers. The laws that apply generally to the activities of man at least provide one rule for all and choose no one either for favor or disfavor. There is nothing inherent in the oil industry that should lead to its public regulation and control any more than in any other of the great basic activities of this country, which have made this country great whether in agriculture or mining, or manufacturing or lumbering or what not.

Paul Shoup has given the general public something to think about in the speech made before the Advertising Association of Los Angeles. He has given some facts that the public at large needs to know.

The oil industry in California is under obligation to him.

People engaged in the oil industry are pretty generally acquainted with the facts as he has outlined them. But it isn't every oil man who is willing to make the study necessary to the presentation of these facts.

Executives of oil companies are welcomed speakers at various luncheon clubs. The public is interested in knowing some facts on the oil industry.

It is the duty of every oil man who can to set the public right on every occasion. Paul Shoup has shown how.

Why not do it yourself?—Editor.

"In each of these industries, and indeed in every business activity, the great benefits to mankind have been created through placing as little obstruction as is necessary to provide for fair play in the way of individual constructive thought and individual constructive activity.

"Every effort that has added to the sum of human happiness in a material way has arisen from an idea originating in some individual mind and carried to fruition either through the energy and activity of the individual or of others who have taken up the thought and the work, supporting it where the originator left off.

"Whether it be this very fine structure in which we are holding our meeting today or whether it be the lights that illuminate it, or the energy that heats it, somewhere each of the activities has its origin in an individual mind. So in creating our regulations and our laws, we should always take into consideration that repression may be a greater evil than the weakness and wastefulness that accompany the work of all human endeavors.

"Human slavery is a thing of the past and the physical obligations of man to labor in order that he may live become less and less as time goes on. But we must be careful in our collective activities lest we substitute for the slavery of the past, chains upon the constructive thought of the country, chains upon the energy that has given us this constantly bettering environment in which to live, and enslave our intellectual powers to the political red tape of precedent.

"The oil industry is not on trial but there are those who would make it appear that it is on trial.

"Wherein has it failed to meet its obligations to the American people? Twenty-five years ago there were but few automobiles. Developments of the motor industry in that period have been marvelous and the automobile industry is entitled to all the praise that has been given its builders. Yet, alongside and keeping pace with the constantly increasing demand has been the oil industry, as essential to this new form of transportation as the motor vehicle itself.

"There has never been a time since the day of the first automobile when the price of gasoline or the price of lubricating oil has been such as to interfere with the growth of the motor industry. With the automobile indeed, the vital question is one of supply rather than price.

"The Ford machine, the one in largest use, will average, I am informed, twenty miles to the gallon of gasoline. Therefore if gasoline be 15 cents a gallon it means but three-quarters of a cent for each mile traveled. And if it should generally, as it never has, in the State of California within my time, reach 30 cents a gallon, then it would be but one and one-half cents a mile. In this same period we witnessed the conversion of a large part of the railroad mileage of the United States and the larger part of the American merchant marine from the use of coal to the use of oil as fuel.

"The oil industry, even during the feverish demand of wartime, met its fuel and other obligations. It has made possible the increasing use of the internal combustion engine. And the Diesel engines of our own and foreign makes are now becoming common upon waters

"Oil development is primarily a mining business in which the miners do not even have the advantage of uncovering at the surface, veins that are indications of wealth. Beneath the surface they must rely upon geological studies except here and there where there are seepages and as time goes on fewer and fewer become the locations where surface indications are a guide to the depths below. The oil pioneer may have to go blindly for 4000 feet or 5000 feet even, before he knows whether or not he is to be rewarded. His initial expenditure may very easily in the first well and all the appurtenances thereto, exceed $250,000 before he knows whether he has lost or won. He must bore a straight hole into the depths of the earth which for the last thousand feet may get down to a few inches in diameter.

"He cannot see his problems. He

Drilling 15,600 Feet With One Length of Belt

Customer writes: "We have just completed our sixth well with this belt, the wells averaging 2600 feet,

Sensation Belting

is the most ECONOMICAL belt we have ever used."

REDUCES: Shut Downs, Slippage, Repairs, Renewals

JERSEY CITY, N. J.

Rubber Goods of Ultimate Economy

DISTRIBUTORS:

Pacific Mill & Mine Supply Co., San Francisco and Los Angeles, Calif.

Norvell-Wilder Hardware Co., Beaumont, Texas

Bridgeport Machine Co., Wichita, Kan. (17 Branches)

DETROIT **NEW YORK**

PITTSBURGH **KANSAS CITY** **MONTREAL**

Say you saw it in The Oil Weekly

must literally grope his way through them. He may even be in an oil zone and through difficulty in shutting off water or through a crooked hole, or for some other reason lose the entire initial investment. Is it not incredible in these circumstances that the tremendous increase in demand, the need for oil, has been supplied?

"What would become of the millions of motors operating today in the United States if this pioneer work were not constantly under way? The highly productive life of most wells is very short and this is particularly true with the wells producing the lighter oils from which we derive the major part of our gasoline.

"A well begins to drop in its production within a few days after it is brought in and day by day it contributes less and less oil to the market. There is, therefore, a tremendous and overwhelming need for the continuance of this pioneer work of exploration.

"Can you imagine that men will be willing to risk the millions necessary if the reward to them is to be measured in the same way that we measure interest on a bond or dividend on some well known stock or is its control to rest in administration through political channels?

"Never was there an industry that needed more freedom in action, less interference from those who have no responsibility either for production or for the wealth that is to be jeopardized in finding that production.

"The American public will do well to recognize this one fundamental fact: the essential need that exploration for oil shall be kept up at all times on a scale that will meet the constantly increasing need.

"Production may go up or production may go down, but the history of demand in the United States in the last twenty years is one of great increase almost year by year. The American people should keep this fact firmly in their minds at all times. There must be this freedom in action and such reward possible as to make men risk their capital and exercise their constructive ability to the utmost, both in maintaining and increasing the oil supply. Not even when oil fields are discovered on a large scale is there assurance that as a whole they will give adequate return for the money and energy expended in their development. Always there will be great individual losses, either through trouble with wells or through drilling outside of productive areas or through mismanagement. Always the reward will be unevenly distributed unless indeed one interest possesses substantially the entire field, which rarely is the case and particularly is that true in Southern California.

"This situation may be illustrated by a brief reference to the three great southern fields which have been such a factor on the national oil market during the past 18 months. Santa Fe Springs, Huntington Beach and Long Beach produced 183,000,000 barrels of oil in 1923 and up to date have produced 228,136,000 barrels. The average price of this oil at the refinery or at the harbor for export, based on the field market price has been very little if any over $1.10 a barrel, giving a gross value at these points of $200,000,000 for the production of these fields last year, or $250,000,000 for their entire production. A very large amount you will say, but as against that let us for a moment examine the tremendous expenditures necessary to bring this oil from 4000 feet or more below the surface of the earth to these refineries and to the tankers that come into Los Angeles Harbor.

"These costs include field development with the field tankage, wells, gathering lines, pumping plants and so on. Then the pipe lines to reach the refineries or seaboard and the storage facilities either in the way of concrete reservoirs for the heavier oils or steel tankage for the light oils. I know of no detailed study, but a somewhat general review of the situation justifies statements of expenditures in connection with these great fields as follows:

"Field expenses, including well development, $180,500,000; pipe lines and pumping plants, $9,000,000; steel and concrete storage including cost of lands, $21,500,000; loading plants and storage at the harbor, $6,800,000. Total, $217,800,000.*

"It must be remembered that the well investments are substantially total losses when the wells are exhausted, and that pipe lines and tankage have relatively little salvage value. So when there is no more oil to utilize them they are but the equivalent of so much junk.

"It must be remembered, too, that in connection with the operation of the plants there are very large current expenses including the item of taxes, of insurance, the cost of pumping and all of the other expenses that have to do with the movement and storage of oil.

"It is thus plainly indicated that up to date these three great fields have not returned the money invested therein and with the greater proportion of the oil extracted the investors must look to what is left to determine their reward. For we have no assurance that the larger part of these facilities can be utilized on the extensive scale that was needed to care for the great flood of production that gushed forth in these three locations last year.

"In closing I might illustrate how rapidly production dwindles from the peak by pointing out that in the month of August last Santa Fe Springs produced 9,999,000 barrels, or substantially 10,000,000 barrels of oil and that in the month of January the production was cut about half, being only 4,278,000 barrels. Huntington Beach found its peak in July with 3,417,000 barrels, which was reduced to 1,986,000 barrels in January, or more than 40 per cent. The Long Beach or Signal Hill field reached its maximum in October, 7,500,000 barrels, and in January had dropped a little less than a million barrels, or to 6,778,000 barrels.

"All fields are now showing rapid decreases and all told these three fields are producing 250,000 barrels per day less than they did when aggregated under their peak productions. What today is the result of this great flush production which has thus fallen off 250,000 barrels per day as against the period of its peak? Well, we have in California 45,000,000 barrels of fuel oil or less than five months supply.

"We have in the United States less than sixty days supply of gasoline. We have of course too a very considerable quantity of crude oil in storage and in transit and in semi-manufactured stages which will contribute further to this gasoline supply but probably at not any greater rate than consumption itself. The tremendous river of oil that flows out of the wells of the United States and of Mexico and diverted into its various constituent streams of gasoline, kerosene, fuel oil, lubricants and other distillates is of such great size as to challenge the comprehension of those who are only slightly familiar with the subject when it increases at its sources to the point where it may be said to choke its physical and financial channels.

"Tremendous efforts must be made to care for it and when it diminishes in perhaps a comparatively small degree anxiety is felt lest the great industries that exist along this stream shall not receive a supply adequate to their needs. The impression that I would leave with you above all others is that the vital and essential thing to the welfare of American industries and the American people, is the continuance of the great pioneer work of the oil industry that the sources of our supply may be maintained. It is indeed essential that the men engaged in this industry shall have such freedom of action, such control over their own investments, and such hope of reward in these pioneer efforts with their great hazards, as will enable them in the future as it has in the past to keep this great river of oil running bankfull."

*Note—That royalties not included, this is at least one-sixth in addition to bonus.

Corona Plans to Drill 50 Wells in Cacalilao

Tampico, Tamps., March 7.—During the year 1924 the Corona Oil Company will drill 50 new wells if present plans are carried out. This drilling program is being put on to attempt to bring the production of the company back to approximately 100,000 barrels daily.

The Corona has probably experienced the biggest slump of any company operating in Mexico. Its total production has fallen from a little more than 114,000 barrels daily to less than 28,000 barrels daily at the present time.

Present plans are to keep 18 rigs in active operation throughout the year. The company now has nine wells drilling, three rigged up, derricks erected for two more and material is being hauled to nine locations.

Cacalilao will be the center of the Corona's activity. Most of the wells will be drilled in competitive area, especially in lots 1 and 4.

International Adds to Its Field Equipment

Tampico, Tamps., March 7.—Much construction work is under way by the International Petroleum Company. This company is trying to increase withdrawals from its Cacalilao holdings by extending physical properties.

Five additional boilers are being put in at its pump station and additional storage space is being added. A 10 inch flow line has been built from well No. 32, lot 4, to the Transcontinental Petroleum Company pump station.

Specifications for Steel and Iron Pipe

As proposed to the American Petroleum Institute in report made by J. Edgar Pew

1. These specifications apply to lapwelded and seamless steel and iron tubular goods for oil country purposes; covering line, drill, drive pipe, casing and tubing. Where the term "pipe" is used in these specifications, it is intended to cover all classes referred to.

I. MANUFACTURE

2. The steel for welded line pipe, drive pipe, casing and tubing shall be of good welding quality made by the Bessemer, Open Hearth or Electric process. The steel for lapwelded drill pipe shall be made by the open hearth process, and the steel for all seamless drill pipe shall be made by the Electric or open hearth process. Seamless drill pipe and its couplings shall be made of medium or high carbon steel. Upset end drill pipe to have upset of the diameters and lengths as indicated on list attached.

2. (a) The wrought iron shall be made from muck bars made from all pig puddled pig iron free from any admixture of iron scrap or steel.

2. (b) Iron Scrap. This term applies only to foreign or bought scrap and does not include local mill products free from foreign or bought scrap.

2. (c) Open hearth iron.

II. CHEMICAL PROPERTIES

3. Open hearth iron should contain not less than 99.75 per cent metallic iron.

3. (a) The steel shall conform to the following requirements as to chemical composition:

	Bessemer Welded	O. H. Welded	Open Hearth or Electric Seamless Low Carbon	Med. Carbon	High Carbon
Manganese	.30-.60	.30-.60	.30-.60	.35-.70	.35-.70
Phosphorus (not over)	.11	.08	.04	.04	.04
Sulphur (not over)	.065	.06	.05	.05	.05

Check Analysis

4. (a) Analyses of two lengths of pipe in each lot of 400 or less of each size under six inches, and in each lot of 200 or less of each size six inches or over, may be made by the purchaser.

4. (b) If the analysis of only one length of pipe does not conform to the requirements specified, analyses of two additional lengths of pipe from the same lot shall be made, each of which shall conform to the requirements specified.

4. (c) Drilling for analyses shall be taken from several points around each length of pipe, selected for tests.

III. PHYSICAL PROPERTIES

5. (a) The material shall conform to the following minimum requirements as to tensile properties:

STEEL

	Welded Bessemer	Welded O. H.	Seamless Low Carbon	Seamless Med. Carbon	Seamless High Carbon
Tensile Stgth. lbs. per sq. in.	50,000	45,000	48,000	62,000	75,000
Yield Point lbs. per sq. in.	30,000	25,000	30,000	35,000	45,000
Elongation in 8" per cent	20	22	40(in 2")25(in 2")	..	..
Elongation in 2" per cent	..	..	40(in 2")	25(in 2")	20

WROUGHT IRON

Tensile strength, lbs. per sq. in.....42,000
Yield point, lbs. per sq. in.....24,000
Elongation in 8", per cent..... 12

OPEN HEARTH IRON

Tensile strength, lbs. per sq. in.....45,000
Yield point, lbs. per sq. in.....25,000
Elongation in 8", per cent..... 22

5. (b) The yield point shall be determined by the drop of the beam testing machine.

6. (a) Each length of Oil Country tubular machinery shall be tested at the mill by the hydrostatic pressure specified in tables appended. Lapwelded pipe shall be struck, near both ends while under pressure, a blow with a two-pound hammer or its equivalent, and the hydrostatic pressure specified shall be maintained for one minute.

6. (b) The test pressure on sizes not listed should not exceed those required by the formula:

$$P = \frac{2St}{D}$$

In which P equals pressure in lbs. per sq. in.
S equals allowable fiber stress 16,000 lbs., per sq. in. for steel pipe, 14,000 lbs., per sq. in. for open hearth iron, and 12,000 lbs., per sq. in. for wrought iron pipe;
t equals thickness of the wall in inches;
D equals outside diameter in inches.

Flattening Tests

7. (a) The crop ends cut from each length of steel or open hearth iron lapwelded pipe shall withstand flattening between parallel plates, until the distance between the plates is one-third the outside diameter of the pipe, without cracking or showing any injurious flaws. The tests shall be made with the weld approximately 45 degrees from the point of maximum bend. If any section fails, another piece may be cut. Should the second test fail, the pipe shall be rejected.

7. (b) The crop ends cut from each length of lapwelded wrought iron pipe shall be flattened until broken. The test shall be made with the weld approximately 45 degrees from the point of maximum bend. The test piece must show a good weld and the fracture shall have a fibrous appearance. If any section fails to meet these requirements, another piece may be cut. Should the second test fail, the pipe shall be rejected.

Drift Tests

8. (a) Each length of casing and drill pipe shall be drifted with cylindrical mandrels of the following dimensions:

	Diameter	Length
For sizes up to 8⅝" O. D., incluisve	1/16" smaller than nominal I.D. of pipe	6 inches
For sizes over 8⅝" O. D. to 14" O. D., inclusive	5/32" smaller than nominal I.D. of pipe	12 inches
For sizes over 14" O.D.	3/16" smaller than nominal I.D. of pipe	12 inches

8. (b) All tubing shall be drifted to insure free passage of a plunger 42 inches long and 3/32-inch smaller than nominal inside diameter of tubing.

Test Specimens

9. (a) Tension test specimens shall consist of sections cut longitudinally from pipe, at any point in the pipe selected by the inspector, and specimens shall not be flattened before testing.

9. (b) All testing shall be done cold.

Number of Tests

10. One of each of the tests specified in Section 6 may be made on a length in each lot of 400 or less, of each size under 6 inches, and in each lot of 200 or less, of each size 6 inches or over.

Retests

11. If the result of the physical tests of any lot do not conform to the requirements specified in Section 6, retests of two additional lengths shall be made, each of which shall conform to the requirements specified.

IV. STANDARD WEIGHTS

12 (a) The standard weights for oil country tubular material of A. P. I. sizes are given in tables appended.

Permissible Variations

12. (b) The weight of any length of pipe shall not vary more than 3½% under or 6½% over that specified; but the carload weight shall not be less than the nominal weight. Each joint shall be weighed separately with coupling screwed on, but with thread protector removed. In arriving at carload weight proper allowances are to be made for thread protectors.

Lengths

13. Unless otherwise specified, pipe shall be furnished as to minimum lengths in accordance with the following:

Tubing and rotary drill pipe.....20 feet
Casing and drive pipe.....18 feet
Line pipe .....16 feet

Jointers, (two short lengths connected by couplings), the minimum length of the shorter piece to be 5 feet, may be shipped to a maximum of 5% of the order for line, casing and drive pipe. No jointers shall be shipped on tubing or rotary drill pipe orders.

V. WORKMANSHIP AND FINISH

14. For pipe 1½" or under in inside diameter, the outside diameter at any point shall not vary more than 1/64" over nor more than 1/32" under the standard size. For pipe 2" or over in inside diameter, the outside diameter shall not vary more than 1% over or under the standard size. Variation in wall thickness at any point shall not be more than 10% plus or minus in lapwelded or seamless pipe.

Ends

15. Unless otherwise specified, pipe

(Continued on page 33)

PROPOSED AMERICAN PETROLEUM INSTITUTE CASING

"Size" of A. P. I. Casing indicates OUTSIDE Diameter

SIZE	Diameter			Thickness	Weight Per Foot				Threads Per Inch	Test Pressure in Lbs.			Couplings			**
	External	Internal	Upset		Plain Ends	Threads & Couplings	Upset Casing without Couplings	Upset Casing with Threads and Couplings		Steel	Open Hearth Iron	Wrought Iron	Diameter for casing not Upset	Length	Diameter Upset Casing	Depth in feet for Compression factor of safety of 2 for lap weldSteel
* 4-3/4	4.75	4.082		.334	15.752	16.00			10	2200	1900	1700	5.364	6-5/8		5420
4-3/4	4.75	4.082	5.	.334			16.03	16.28	10	2200	1900	1700		7	5.65	5420
5-3/4	5.75	5.29		.23	13.56	14.00			10	1200	1100	900	6.5625	7-1/2		2390
5-3/4	5.75	5.19		.28	16.36	17.00			10	1500	1300	1100	6.5625	7-1/2		3260
5-3/4	5.75	5.09		.33	19.10	20.00			10	1800	1600	1300	6.5625	7-1/2		4130
5-3/4	5.75	5.09	6.	.33			19.36	20.20	10	1800	1600	1300		8-1/2	6.75	4130
5-3/4	5.75	4.99		.38	21.80	23.00			10	2100	1800	1600	6.5625	7-1/2		5000
5-3/4	5.75	4.99	6.	.38			22.16	23.09	10	2100	1800	1600		8-1/2	6.75	5000
* 6-5/8	6.625	6.049		.288	19.491	20.00			10	1400	1200	1000	7.390	7-5/8		2740
* 6-5/8	6.625	5.921		.352	23.582	24.00			10	1700	1500	1200	7.390	7-5/8		3710
* 6-5/8	6.625	5.855		.385	25.658	26.00			10	1800	1600	1400	7.390	7-5/8		4200
* 6-5/8	6.625	5.791		.417	27.648	28.00			10	2000	1700	1500	7.390	7-5/8		4690
8-1/8	8.125	7.485		.32	26.68	28.00			10	1200	1100	900	9.0937	8-1/2		2330
8-1/8	8.125	7.385		.37	30.65	32.00			10	1400	1200	1100	9.0937	8-1/2		2940
8-1/8	8.125	7.285		.42	34.56	36.00			10	1600	1400	1200	9.0937	8-1/2		3560
8-1/8	8.125	7.185		.47	38.42	40.00			10	1800	1600	1400	9.0937	8-1/2		4180
8-1/8	8.125	7.185	8.375	.47			38.80	40.31	10	1800	1600	1400		8-1/2	9.30	4180
* 8-5/8	8.625	8.017		.304	27.016	28.00			10	1100	1000	800	9.627	8-1/8		1920
* 8-5/8	8.625	7.921		.352	31.101	32.00			10	1300	1000	900	9.627	8-1/8		2470
* 8-5/8	8.625	7.825		.400	35.137	36.00			10	1400	1300	1100	9.627	8-1/8		3030
* 8-5/8	8.625	7.775		.425	37.220	38.00			10	1500	1300	1100	9.627	8-1/8		3320
* 8-5/8	8.625	7.651		.487	42.327	43.00			10	1800	1500	1300	9.627	8-1/8		4040
10-3/4	10.75	10.05		.35	38.88	41.00			8	1000	900	800	11.75	8-1/2		1650
10-3/4	10.75	9.95		.40	44.22	46.00			8	1200	1000	900	11.75	8-1/2		2100
10-3/4	10.75	9.85		.45	49.50	52.00			8	1300	1100	1000	11.75	8-1/2		2580
10-3/4	10.75	9.76		.495	54.22	56.00			8	1400	1300	1100	11.75	8-1/2		3000
* 11-3/4	11.75	11.00		.375	45.557	47.00			8	1000	800	700	12.866	8-1/8		1590
* 11-3/4	11.75	10.72		.489	58.811	60.00			8	1300	1100	1000	12.866	8-1/8		2560
13-3/8	13.375	12.715		.33	45.97	49.00			8	800	700	600	14.375	9		860
13-3/8	13.375	12.615		.38	52.73	55.00			8	900	800	600	14.375	9		1230
13-3/8	13.375	12.515		.43	59.44	62.000			8	1000	900	700	14.375	9		1610
13-3/8	13.375	12.415		.48	66.10	69.00			8	1100	1000	800	14.375	9		2000
16	16.00	15.375		.3125	52.36	56.00			8	600	500	400	17.00	9		425
16	16.00	15.250		.375	62.58	66.00			8	700	600	500	17.00	9		740
16	16.00	15.125		.4375	72.72	76.00			8	800	700	600	17.00	9		1130
16	16.00	15.010		.495	81.97	85.00			8	1000	800	700	17.00	9		1500
18-5/8	18.625	17.855		.385	75.00	79.00			8	600	500	500	19.75	9		510
18-5/8	18.625	17.755		.435	84.51	89.00			8	700	600	500	19.75	9		730
18-5/8	18.625	17.655		.485	93.96	98.00			8	800	700	600	19.75	9		1000
21-1/2	21.50	20.71		.395	89.04	95.00			8	600	500	400	22.9375	9		360
21-1/2	21.50	20.61		.445	100.07	106.00			8	600	500	500	22.9375	9		510
21-1/2	21.50	20.51		.495	111.00	117.00			8	700	600	500	22.9375	9		700
24-1/2	24.50	23.85		.325	83.91	92.00			8	400	350	300	26.125	9		130
24-1/2	24.50	23.75		.375	96.62	105.00			8	500	400	350	26.125	9		200
24-1/2	24.50	23.65		.425	109.26	118.00			8	500	500	400	26.125	9		300

*Sizes for California and similar territory: These are standard at present. Dimensions and weights copied from lists now in use and "SIZE" changed to O.D.

**To ascertain setting depth with safety factor of 2 with liquids heavier than fresh water divide the tabular number of feet by specific gravity of heavier liquid, or multiply by 8-1/3 and divide product by weight per gallon of heavier liquid.

***To ascertain setting depth for any other factor than 2 multiply the tabular number of feet by 2 and divide the product by the desired factor.

Taper of threads on 10-Thread pipe 3/8" diameter per foot of length.

Taper of threads on 8-Thread pipe 3/4" diameter per foot of length.

Assuming 30% greater strength to resist collapse for high carbon seamless steel:

4-3/4" 16-lb. Casing would set 7,000' with the factor of safety of 2.
5-3/4" 23-lb. Casing would set 7,000' with a factor of safety of 1.85.
6-5/8" 28-lb. Casing would set 6,100' with the factor of safety of 2.
8-1/8" 40-lb. Casing would set 6,000' with a factor of safety of 1.82.

When Joints are screwed tight the ends of casing shall be 5/8" from center of coupling and, when in this position, the outside diameter of thread at end of coupling to be that of the nominal outside diameter of casing. Beyond end of coupling there shall be 2 threads perfect at the bottom on 8-thread and 3-threads on 10-thread casing.

Extreme depth of recess in couplings not to exceed 5/8".

Demand for Crude Oil Shows Conservatism

Less open talk of premiums paid in Mid-Continent; promised raise overdue

Tulsa, Okla., March 5.—What may be conveniently termed a temporary lull or settling has enveloped the crude oil market in this section of the Mid-Continent field. Apparently there has been no letting up in the scampering about for more oil but most of the buyers have become a bit more conservative, or rather they are not quite so open with their practices nor with their premiums, although there is much oil that is commanding a bounty.

Another increase in price was prophesied by the first of the month but if one was due it now is considerably delayed. To all intents the major purchasers, such as the Prairie, Sinclair, Gypsy, Texas Company, Magnolia and others, are getting enough oil to supply their temporary needs and are not content to officially admit that they are being outbidden by independents. However, a number of crude buyers are out extending their crude handling facilities both in Oklahoma and Kansas.

The Magnolia has completed arrangements to re-enter the Burbank pool as a buyer and will connect up with a number of leases of Phillips Petroleum Company in Osage County. The Magnolia tapped the Burbank early last summer through a mutual agreement with Phillips Petroleum but with the institution of the shut down quit running oil from the field. The Empire has completed the construction of a four inch line from Graham to the Fox pool in Southern Oklahoma and the Magnolia has started oil through its line from Graham to its North Duncan station in Stephens County. Due to increased business for handling crude in the Hewitt field the Empire also is prepared to install a gravity gathering system in the section and a pump station is to be built. Work on the project is to start immediately. Up in Kansas the National Refining Company is laying some 44 miles of new line to better enable the company to handle its oil. The National operates a refinery in Coffeyville, Kansas, and several in Ohio, where is located the company's headquarters.

The new pipe line of the Oklahoma Pipe Line Company from the Hewitt field in Southern Oklahoma to DeQueen, Arkansas, is completed and the line is being put in service. This marks the completion of another important link in the Mid-Continent gathering and transporting system of the Standard Oil Company (New Jersey). The oil is handled from DeQueen to Baton Rouge in Louisiana for account of the Standard Oil Company (Louisiana).

There is some conjecture both here and in Wichita and other Kansas points as to what the prospect is for the producer in the Sunflower state to shortly be afforded an additional market for his crude. This has been brought about by the announced intention of the Prairie Oil and Gas Company yesterday before the Kansas supreme court at Topeka to engage in the oil refining and marketing business in the state and to construct one or more refineries in Kansas. Under the present law the Prairie is prohibited from refining oil in the state, only being allowed to produce it. Producers believe that the court will amend the limitations after the facts have been presented and that freedom being permitted the Prairie to go forward with its building program, there will be created an additional demand for crude.

Interest is growing in the approaching Osage sale but there is an opinion expressed that the auction likely will be characterized by more caution than at the two prior sales. From all accounts a number of new faces will be seen at the coming sale. This includes the Ohio Oil Company, acting through the Mid-Kansas Oil and Gas Company, and the Indian Territory Illuminating Oil Company is understood to be again included among the buyers of Osage acreage.

CONDENSED U. S. PRODUCTION

The daily average production of the fields of the United States for the past week follows:

	Barrels
Mid-Continent (Oklahoma, Kansas and North Texas)	754,110
California	646,100
Oklahoma	411,850
Texas	382,535
Wyoming-Montana	129,550
Arkansas	116,285
Eastern States	100,000
Kansas	68,915
Louisiana	58,145
Total	1,913,380

Illinois Representative Would Show Nothing Was Lost by Scandal Leases

Washington, D. C., March 5.—In order to "clarify the atmosphere surrounding the oil scandals and bring out the really good side of this national calamity," Representative Britten of Illinois has introduced a resolution calling upon the Secretary of the Navy to furnish certain information designated to bring out that the government was faring better under the leases which are being attacked than it would have under any other method of dealing with oil reserves, that Secretaries Denby and Daniels were "headed in the same direction for the protection of navy oil," that leases were made in the Wilson administration in the same manner as the Sinclair and Doheny contracts, and that under these contracts the government would have made many millions more than from all "of the cash bonuses ever received from the sale of government leases in the entire Salt Creek field."

The president nominated Samuel Knight of San Francisco to be special counsel to prosecute the cancellation of the Standard Oil Company lease in the Elk Hills reservation. There is some objection to his appointment being voiced in the senate, where it is charged that he is attorney for a Rockefeller bank in New York and is now prosecuting a case for that bank in California.

Reports that Harry Sinclair will resign from the Sinclair Consolidated and be succeeded by James O'Neil, formerly of the Prairie Oil and Gas Company, which were current in the Mid-Continent during the past week have no foundation according to information received by The OIL WEEKLY from the New York office of the Sinclair organization.

"Neither Mr. Sinclair nor the other officials of the company know anything of such a movement," The OIL WEEKLY was advised last week, just after going to press.

During the week Senator Walsh has made public correspondence showing that Doheny last December sought to interest him in an oil enterprise, which he refused because of his position as senator.

Hearings before the investigating committee developed that McLean has been a dollar-a-year secret agent of the Department of Justice since shortly after Harding's inauguration, and that code telegrams sent to Florida were for the purpose of suggesting his resignation lest he embarrass the attorney general.

After A. Mitchell Palmer, former attorney general, had denied having any connection with Fall or Sinclair, Francis H. McAdoo of New York testified that McLean telegraphed him that Palmer was acting as attorney for both the men mentioned.

New code telegrams are now before the committee which, it is believed, may have an important bearing on the investigation.

Considerable discussion was held in the senate when it became known that E. L. Doheny had received a tax refund of $40,000 from the treasury last year.

A new inquiry is to be started into alleged speculation by government officials on the basis of information secured from secret reports. The story is current that Attorney General Daugherty went to the race track with H. F. Sinclair, that the former bet money on the horses for other members of the cabinet and lost and that he then turned some money over to Sinclair to bet and won.

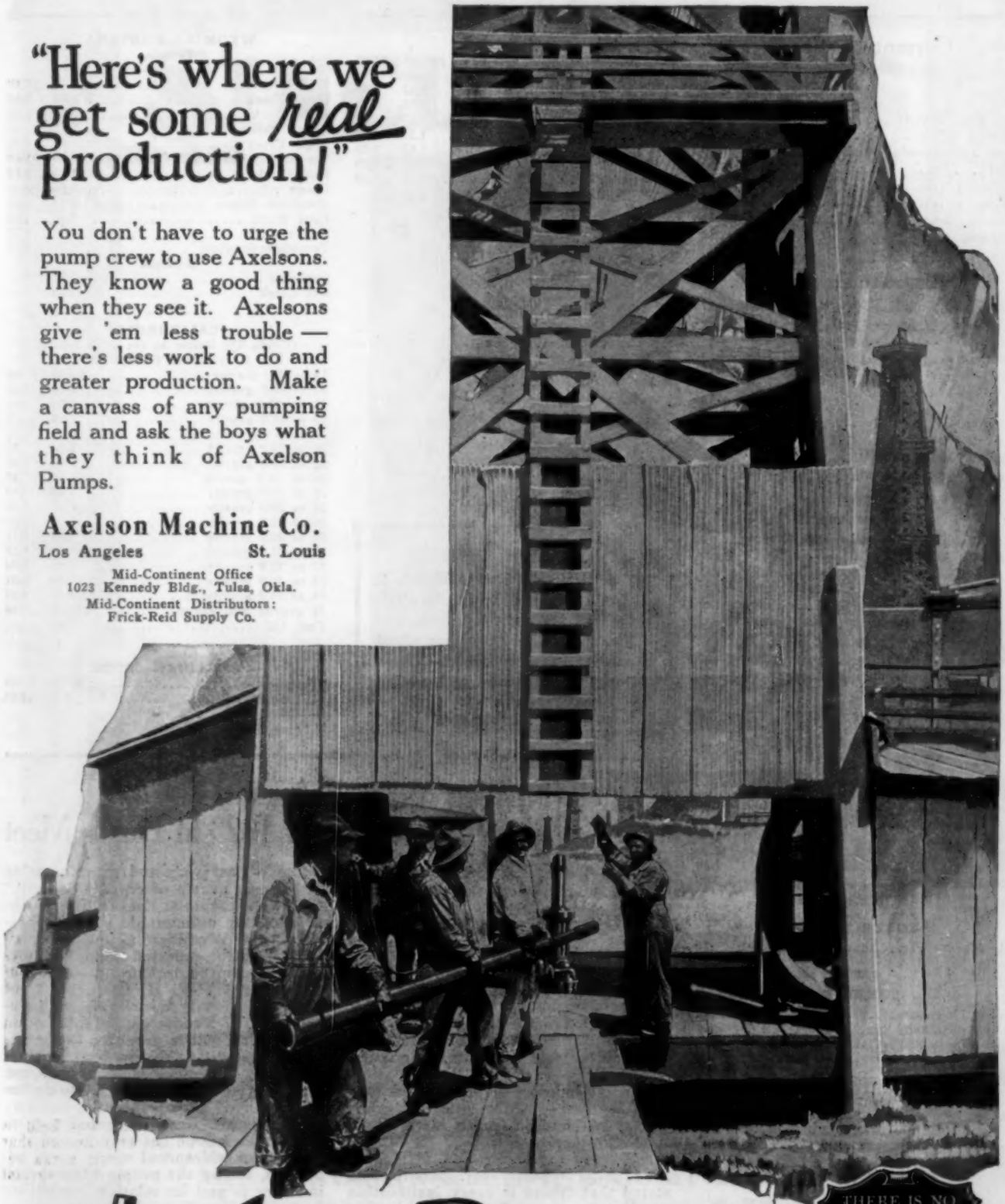
"Here's where we get some *real* production!"

You don't have to urge the pump crew to use Axelsons. They know a good thing when they see it. Axelsons give 'em less trouble — there's less work to do and greater production. Make a canvass of any pumping field and ask the boys what they think of Axelson Pumps.

Axelson Machine Co.

Los Angeles St. Louis

Mid-Continent Office
1023 Kennedy Bldg., Tulsa, Okla.
Mid-Continent Distributors:
Frick-Reid Supply Co.



THERE IS NO ECONOMICAL SUBSTITUTE FOR QUALITY

Axelson Pumps

Say you saw it in The Oil Weekly

CRUDE OIL PRICE QUOTATIONS FOR ALL FIELDS

Current Postings

EASTERN STATES

	Mar. 8 1924	Mar. 10 1923
New York Transit	$4.50	$4.25
Bradford (Pa.)	4.50	4.25
Other Pennsylvania grades	4.00	4.00
Cabel	2.05	2.76
Ragland	1.00	1.10
Corning	1.95	2.30
Somerset, heavy	2.15	2.55
Somerset, light	2.15	2.80

CENTRAL STATES

Illinois	$1.92	$2.38
Indiana	1.93	2.38
North Lima	2.13	2.58
South Lima	2.13	2.58
Plymouth	1.30	1.75
Lodi	1.80	...
Princeton	1.92	2.38
Waterloo	1.40	1.85
Wooster	2.00	2.50
Western Kentucky, light	2.21	...
Western Kentucky, heavy	2.01	...

MID-CONTINENT

(Prairie Prices posted Feb. 2, 1924)

Below 30 gravity	$1.15	$ ...
30 to 32.9 gravity	1.30	...
33 to 35.9 gravity	1.60	...
36 to 38.9 gravity	1.85	...
39 gravity and above	2.00	...

(Magnolia prices 2-2-24)

Below 28 gravity	$1.00	$ ...
28 to 30.9 gravity	1.15	...
31 to 32.9 gravity	1.30	...
33 to 35.9 gravity	1.60	...
36 to 38.9 gravity	1.85	...
39 gravity and above	2.00	...

NORTH CENTRAL TEXAS

Corsicana (light)	$1.85	$1.50
Corsicana (heavy)	1.00	.90
Thrall	1.00	1.90
Mexia	1.85	2.20
Currie	2.00	2.60
Rockdale-Minerva	1.60	2.00

SOUTH TEXAS

Mirando	.80	.75

SOMERSET

Below 33 gravity	$1.15	$ ...
33 to 35.9 gravity	1.40	...
36 to 38.9 gravity	1.60	...
39 gravity and above	1.75	...

GULF COAST

Grade "A"	$1.65	$ ...
Grade "B" at Blue Ridge, Hull and Pierce Junction	1.40	1.05

LOUISIANA-ARKANSAS

Caddo

38 gravity and above	$1.70	$ ...
35 to 37.9 gravity	1.60	...
32 to 34.9 gravity	1.50	...
Below 32 gravity	1.35	...

Homer

35 gravity and above	$1.70	$ ...
33 to 34.9 gravity	1.60	...
31 to 32.9 gravity	1.50	...
Below 31 gravity	1.35	...

Haynesville

33 gravity and above	1.60	...
Below 33 gravity	1.50	...

Bull Bayou

38 gravity and above	$1.65	$2.00
35 gravity to 37.9 gravity	1.50	1.90
32 to 34.9 gravity	1.35	1.85
De Soto crude	1.70	2.20
Crichton	1.50	1.85
Bellevue	1.55	1.35
Jennings	1.65	1.50
Vinton	1.65	1.50
Edgerly crude	1.65	1.50

Smackover

26 gravity and above	1.35	...
25 to 25.9 gravity	1.20	...
24 to 24.9 gravity	1.10	...
Below 24 gravity	1.00	...

El Dorado

33 gravity and above	1.70	...
Below 33 gravity	1.60	...
El Dorado East Field (Calion)	1.00	...

Stephens District

(Atlantic)

(Posted by Atlantic Oil Company 1.10-24)

28 gravity and above 60 degrees	$1.40	...
26 to 27.9 gravity at 60 degrees	1.35	...
23 to 25.9 gravity at 60 degrees	1.20	...
Below 23 gravity at 60 degrees	1.00	...

PRAIRIE RUNS

Independence, Kans., March 5.—Crude oil shipments of the Prairie during February again showed a loss, partially due to the short month, the total being 3,457,175.59 barrels, or 467,469.24 barrels under January shipments.

WYOMING-MONTANA

Wyoming

(Posted 2-5-24)

Elk Basin	$1.80	$2.10
Grass Creek	1.80	2.10
Rock Creek	1.55	1.75
Lance Creek	1.75	2.10
Mule Creek	.95	1.50
Big Muddy	1.35	1.65
Salt Creek	1.45	1.65
Osage	1.75	2.10
Hamilton Dome	1.40	1.65
Pilot Butte	1.10	1.40
Landers	.70	1.30
Torchlight-Greybull	1.80	2.10

Montana

Sunburst	.95	...
Cat Creek	1.70	2.10

CALIFORNIA

(Crude Oil Prices at the Well 2-6-24)

Los Angeles and Orange Counties

14 to 19.9 gravity	$1.00	$ .60
20 to 20.9 gravity	1.01	.62
21 to 21.9 gravity	1.02	.65
22 to 22.9 gravity	1.03	.70
23 to 23.9 gravity	1.05	.75
24 to 24.9 gravity	1.07	.80
25 to 25.9 gravity	1.10	.85
26 to 26.9 gravity	1.13	.90
27 to 27.9 gravity	1.16	.95
28 to 28.9 gravity	1.19	1.00
29 to 29.9 gravity	1.22	1.05
30 to 30.9 gravity	1.25	1.11
31 to 31.9 gravity	1.28	1.17
32 to 32.9 gravity	1.31	1.24
33 to 33.9 gravity	1.34	1.31
34 to 34.9 gravity	1.37	1.38
35 gravity and above	1.40	1.45
Fuel Oil	1.40	...

CANADIAN CRUDE

*Petrolia	$2.53	$2.88
*Oil Springs	2.60	2.95

*Plus 2½ cents bounty.

Western Refiners Warned Against Repetition of 1923 at Dallas Meet

Dallas, Texas, March 6.—Sounding a note of warning lest the oil industry experience a repitition of the disastrous year of 1923, leaders of the industry attending the annual meeting of the Western Petroleum Refiners Association held here during the past three days pointed out the similarity of present conditions with those of this time last year, and urged that the industry under its present optimism go not too fast.

The oil industry is confronted now with increases in the price of crude similar to increases made at this time last year, declared George N. Moore, president of the association, in making his annual report. Mr. Moore also stated that "there is every justification of these increases because production is declining in nearly all of the important fields and also because the present crude prices provide only a moderate profit for the producer. Nevertheless this stimulation of crude price may bring about an over production, as was the case a year ago."

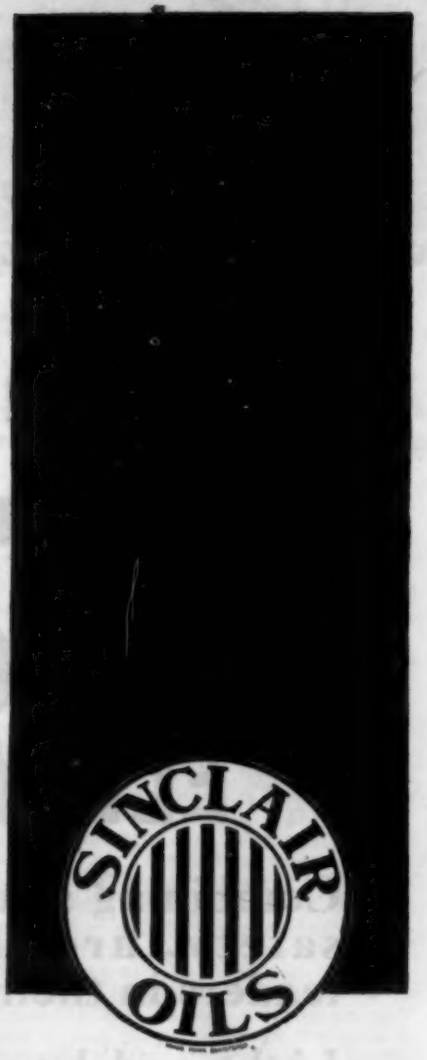
Mr. Moore continued that "even though history repeats itself in the matter of crude there will be no justification for the refiners repeating their errors of last year and manufacturing gasoline in excess of current demand."

Other speakers at the meeting touched upon the unfavorable situation prevailing at Washington and predicted what might be expected should the government gain control or supervision of the industry. W. H. Gray, president of the National Association of Independent Oil Producers, in talking on the relation of the producer to the refiner, asked that the two branches not only get into a closer harmony but that they combine to fight the prejudice being stirred up against the industry at large. Mr. Gray suggested that all trade associations get together and inaugurate a widespread campaign of education, telling the people what the oil industry is and its relative importance in present commercial activity.

The annual meeting, which is acclaimed by members to be the best yet held by the Western Petroleum Refiners Association, was attended by approximately 250 refiners from practically all sections of the country.

An unusually constructive program was carried out and a noticeable atmosphere of optimism prevailed throughout the gathering with predictions of great prosperity for the coming season.

SINCLAIR OILS



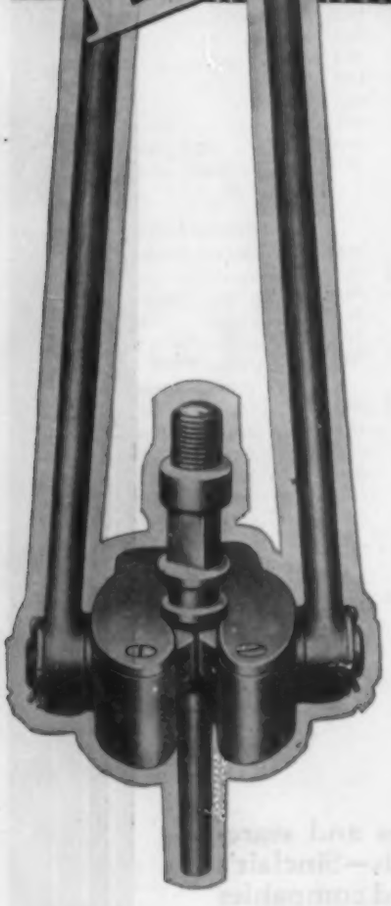
THE convenient location of Sinclair refineries and warehouses—the ready reserve stock of Sinclair Oils—Sinclair's tank trucks and tank cars—tankers of our affiliated companies—these facilities for prompt deliveries give our customers a feeling of satisfaction and security in placing their orders for Sinclair Oils.

"From a Can to a Cargo"

SINCLAIR REFINING COMPANY

New York: Sinclair Oil Building, 45 Nassau Street Chicago: 111 West Washington Street

Cable Adress "Lucent"



Simple in Operation
Dependable in Performance

DUNN SUCKER ROD ELEVATORS

Combining strength, speed and safety, are the accredited leaders in their field.

Light and heavy types for all sizes of rods.

Order from your Supply House

DUNN MFG. CO.

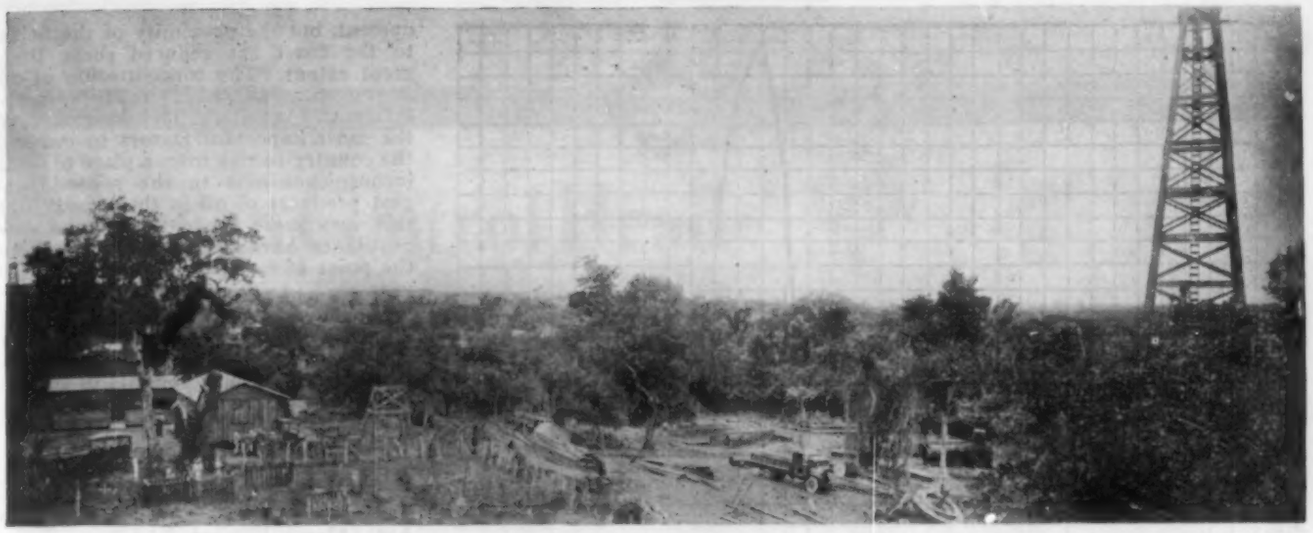
Office and Works
OXNARD, CALIFORNIA

Cable Address: "Dunoiltool" Oxnard, California

All Standard Codes

Correspondence in all Languages

Say you saw it in The Oil Weekly



General scene showing the characteristics of the country in the Panuco district. There is slight resemblance between Mexican fields and those in this country.

Mexican Pools Facing Rapid Depletion

Tendencies indicate that nation has passed its peak as an oil producer

By A. R. McTee

To say that within ten years from today Mexico will not be producing sufficient oil to operate her own industries may seem preposterous. It is difficult to believe such a statement when we recall what the fields of that country have done during the past few years. But if we base our conclusion on present tendencies as shown by figures, we have to admit that Mexico is soon to face a serious situation regarding crude oil production. If the present decline in the output of oil is continued and no new fields are discovered the supply of Mexican crude will be exhausted before ten years have passed.

Geological estimates made in 1921 placed the potential oil resources of Mexico between 300 and 400 million barrels. Last year the total recovery of crude from Mexican fields amounted to more than 152,000,000 barrels. This was a decrease of approximately 30,000,000 barrels as compared with 1922. The decline in 1922 against 1921 was a little more than 11,000,000 barrels. Thus it can be seen that each year the decline is increasing rapidly, and while it may not be logical to suggest that the ratio of three to one will be kept up until the fields are depleted, it is certain that a more or less steady ratio of decrease will be maintained from now on unless new discoveries are made.

The past two years have proved that intensive drilling is futile when it comes to holding up production of Mexican districts. Production has consistently fallen in spite of very widespread efforts to maintain a steady level. New pools have been found and extensions to old ones have been made, but to little avail. A glance at the curve showing the growth of Mexico as an oil producing country will reveal that the rate of decline will probably be as spasmodic as was the rate of increase until the peak of production was reached.

Right now when all efforts are toward holding down production, this situation seems remote and of little consequence. However, it has far reaching effects, not only to our own country but to many other foreign nations as well. The United States depend upon Mexico for practically all the oil imported. In fact we get one-fifth of our supply from Mexico. In 1923, more than 45,000,000 barrels of Mexican crude found its way into the United States. But our imports from Mexican fields are on the decline. The amount of light oil brought in during 1923 was about 11 per cent against 68 per cent in 1922, and it is safe to predict that this percentage will be even lower in 1924.

Aside from the inconvenience that our country will suffer from a shortage of Mexican oil, the decline of the fields of Mexico means that vast amounts of United States capital will be wasted. More than 58 per cent of the money invested in the Mexican oil industry comes from this country.

The oil industry is peculiar in that equipment used in the field development is unfit to use in any other industry. It would be practically impossible to turn the capital invested in Mexican fields to another industry in that country. In view of this fact, it is evident that from now on every operator in Mexico will try to make the most of the situation while it lasts.

The Panuco River

An official in one of the large oil companies in Texas has summarized the situation somewhat in the following manner: "From now on it is going to be a matter 'getting the pie while it lasts,' with the certain knowledge that it is going to play out before long. This indicates much drilling and development work during the coming year. But this work will practically all be confined to the two fields that hold the only prospects worth while, Ebano and Cacalilao."

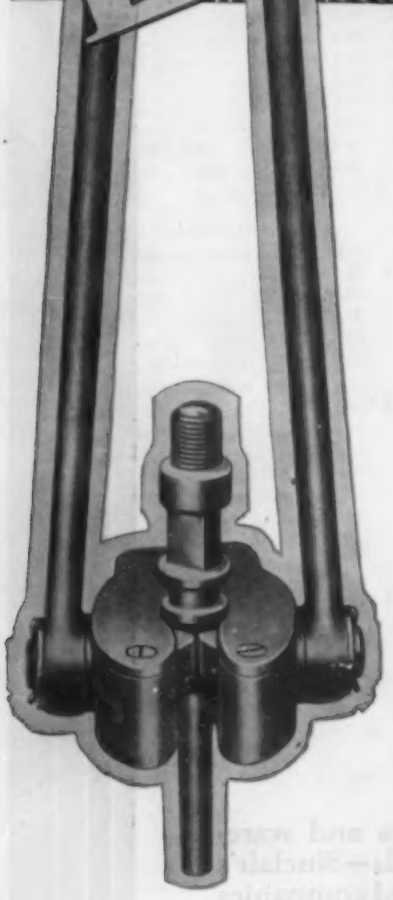
A similar but more emphatic opinion was expressed by another oil man who knows Mexico. He said, "If I were looking for a place to invest in oil, Mexico is the last place in the world that I would think of." Such a statement is significant, not because it comes from one single individual, but because it epitomizes the experience of a big company in Mexico.

It is generally known that all fields in Mexico have shown salt water and that the section known as the southern district has practically been ruined because of this trouble. A majority of the wells in the southern district have had to be pinched in because of salt water. Several sections of the northern district have had salt water trouble, and it is only by the most careful drilling that this field is kept as free from this disturbance as it is. When the wells are drilled too deep, salt water is inevitably the result.

All oil found in Mexico comes from pools resting on top of salt water. The oil is collected in caverns or along joint planes in limestone in great bodies, rather than in beds of sand as in the United States.

This fact accounts for the short life of Mexican fields. There is no settled production such as is found in this country.

One writer has described Mexican wells aptly. He says, "No pump has ever profaned the casing of any Mexi-



Simple in Operation
Dependable in Performance

DUNN SUCKER ROD ELEVATORS

Combining strength, speed and safety, are the accredited leaders in their field.

Light and heavy types for all sizes of rods.

Order from your Supply House

DUNN MFG. CO.

Office and Works

OXNARD, CALIFORNIA

Cable Address: "Dunoiltool" Oxnard, California

All Standard Codes

Correspondence in all Languages

General scene showing the characteristics of the country in the Panuco district. There is slight resemblance between Mexican fields and those in this country.

Mexican Pools Facing Rapid Depletion

Tendencies indicate that nation has passed its peak as an oil producer

By A. R. McTee

To say that within ten years from today Mexico will not be producing sufficient oil to operate her own industries may seem preposterous. It is difficult to believe such a statement when we recall what the fields of that country have done during the past few years. But if we base our conclusion on present tendencies as shown by figures, we have to admit that Mexico is soon to face a serious situation regarding crude oil production. If the present decline in the output of oil is continued and no new fields are discovered the supply of Mexican crude will be exhausted before ten years have passed.

Geological estimates made in 1921 placed the potential oil resources of Mexico between 300 and 400 million barrels. Last year the total recovery of crude from Mexican fields amounted to more than 152,000,000 barrels. This was a decrease of approximately 30,000,000 barrels as compared with 1922. The decline in 1922 against 1921 was a little more than 11,000,000 barrels. Thus it can be seen that each year the decline is increasing rapidly, and while it may not be logical to suggest that the ratio of three to one will be kept up until the fields are depleted, it is certain that a more or less steady ratio of decrease will be maintained from now on unless new discoveries are made.

The past two years have proved that intensive drilling is futile when it comes to holding up production of Mexican districts. Production has consistently fallen in spite of very widespread efforts to maintain a steady level. New pools have been found and extensions to old ones have been made, but to little avail. A glance at the curve showing the growth of Mexico as an oil producing country will reveal that the rate of decline will probably be as spasmodic as was the rate of increase until the peak of production was reached.

Right now when all efforts are toward holding down production, this situation seems remote and of little consequence. However, it has far reaching effects, not only to our own country but to many other foreign nations as well. The United States depend upon Mexico for practically all the oil imported. In fact we get one-fifth of our supply from Mexico. In 1923, more than 45,000,000 barrels of Mexican crude found its way into the United States. But our imports from Mexican fields are on the decline. The amount of light oil brought in during 1923 was about 11 per cent against 68 per cent in 1922, and it is safe to predict that this percentage will be even lower in 1924.

Aside from the inconvenience that our country will suffer from a shortage of Mexican oil, the decline of the fields of Mexico means that vast amounts of United States capital will be wasted. More than 58 per cent of the money invested in the Mexican oil industry comes from this country.

The oil industry is peculiar in that equipment used in the field development is unfit to use in any other industry. It would be practically impossible to turn the capital invested in Mexican fields to another industry in that country. In view of this fact, it is evident that from now on every operator in Mexico will try to make the most of the situation while it lasts.

The Panuco River

An official in one of the large oil companies in Texas has summarized the situation somewhat in the following manner: "From now on it is going to be a matter 'getting the pie while it lasts,' with the certain knowledge that it is going to play out before long. This indicates much drilling and development work during the coming year. But this work will practically all be confined to the two fields that hold the only prospects worth while, Ebano and Cacalilao."

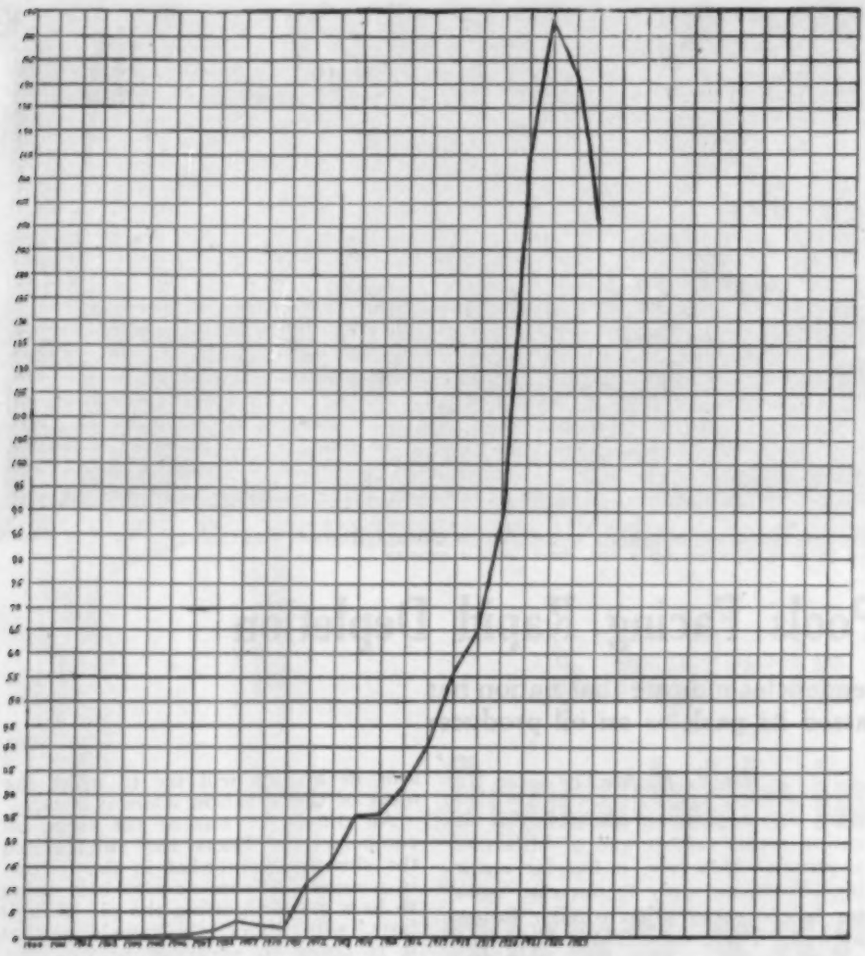
A similar but more emphatic opinion was expressed by another oil man who knows Mexico. He said, "If I were looking for a place to invest in oil, Mexico is the last place in the world that I would think of." Such a statement is significant, not because it comes from one single individual, but because it epitomizes the experience of a big company in Mexico.

It is generally known that all fields in Mexico have shown salt water and that the section known as the southern district has practically been ruined because of this trouble. A majority of the wells in the southern district have had to be pinched in because of salt water. Several sections of the northern district have had salt water trouble, and it is only by the most careful drilling that this field is kept as free from this disturbance as it is. When the wells are drilled too deep, salt water is inevitably the result.

All oil found in Mexico comes from pools resting on top of salt water. The oil is collected in caverns or along joint planes in limestone in great bodies, rather than in beds of sand as in the United States.

This fact accounts for the short life of Mexican fields. There is no settled production such as is found in this country.

One writer has described Mexican wells aptly. He says, "No pump has ever profaned the casing of any Mexi-



Production curve of Mexican Production. Horizontal figures represent years; vertical figures represent millions of barrels.

Country	Proven Producing Area in Sq. Miles	Produc. 1920 Millions of Barrels	Pro. Wells 1920	Average Daily Pro. per Well 1920	Estimated Oil Reserves Millions of Barrels
Mexico	25	163	200	2,600	300 to 400
United States	4,500	443	258,600	4.9	6,000*

*From U. S. Geological Survey.

can well. These wells are born into the full virility of their gigantic powers. They live like giants, straining at the chains that bind them, and they die as giants should, stricken as by a thunderbolt."

A study of the above table will show the principal difference between the Mexican oil situation and that in the United States.

Mexico has suffered from over-production for several reasons. In the first place, the availability of Mexican oil has made it attractive. Initial output of successful wells has undoubtedly been the factor in drawing capital to Mexican fields. A gusher of 100,000 barrels is a prize to be sought after, even though it does not last long, and in the heyday of Mexican development, wells of this size were not at all uncommon. Then again, Mexico is close to the greatest oil market in the world. Quick profits can be realized by operators, with oil bringing a low price. Transportation facilities have been hampering obstacles in Mexican development, but the proximity of the fields to the coast has reduced these to a great extent. The concentration of oil in proven areas and its ready susceptibility to extraction have been by far the most important factors in causing the country to rise from a place of total inconspicuousness to the second biggest producer of oil in the world. But this very same concentration and susceptibility have brought the supply to the point of exhaustion in less than 20 years.

*Pogue, Economics of Petroleum, Chapt. XXV, p. 327.

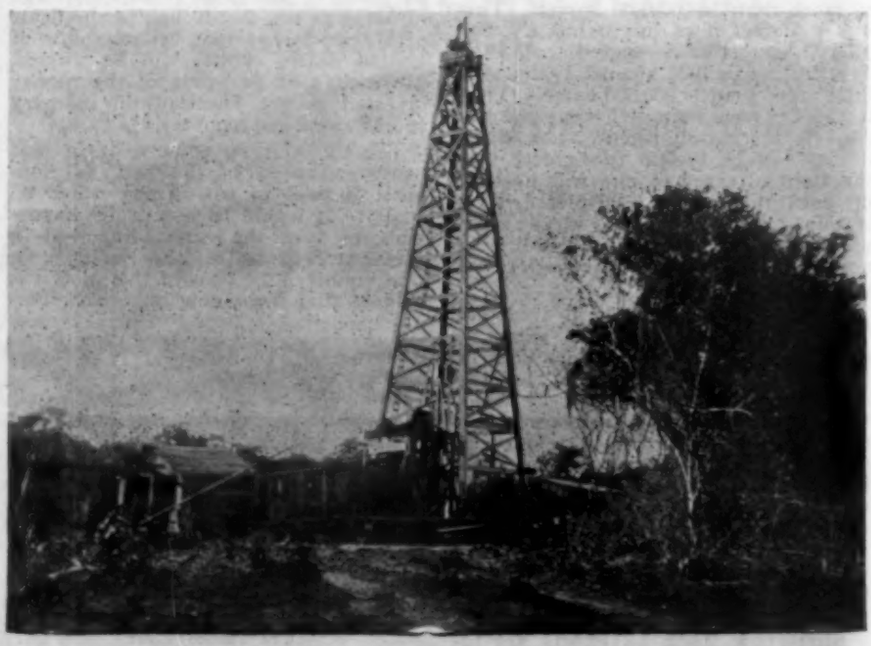
Proven fields in Mexico are divided into two groups: the northern district and the southern district. The northern district, Panuco, consists of several fields, Ebano, Topila and Cacalilao being the most important at this time.

The southern field comprises a number of producing areas: Dos Bocas, Tepetate-Casiano-Chinampa, Amatlan-Naranjos - Zacamixtle, Toteco - Cerro Azul, Alazon-Potrero del Llano, Tierra Blanca, Alamo and Molino.

Panuco is located about 30 miles southwest of Tampico; the southern district is about 90 miles south of Tampico, north of the Tuxpam river.

Oil produced in the northern district is classed as heavy, with a gravity ranging from 10 to 13 degrees Be. This oil contains such a small per cent of gasoline that it is suitable for fuel without refining. When topped, this crude gives approximately 3.5 per cent gasoline, 4 per cent kerosene, 90.5 per cent fuel oil, with 2 per cent loss. Upon a more thorough refining, the heavy crude can be made to yield 3.5 per cent gasoline, 4.5 per cent kerosene, 17 per cent gas oil, 5 per cent lubricating oil, 65 per cent asphalt, and 5 per cent loss.*

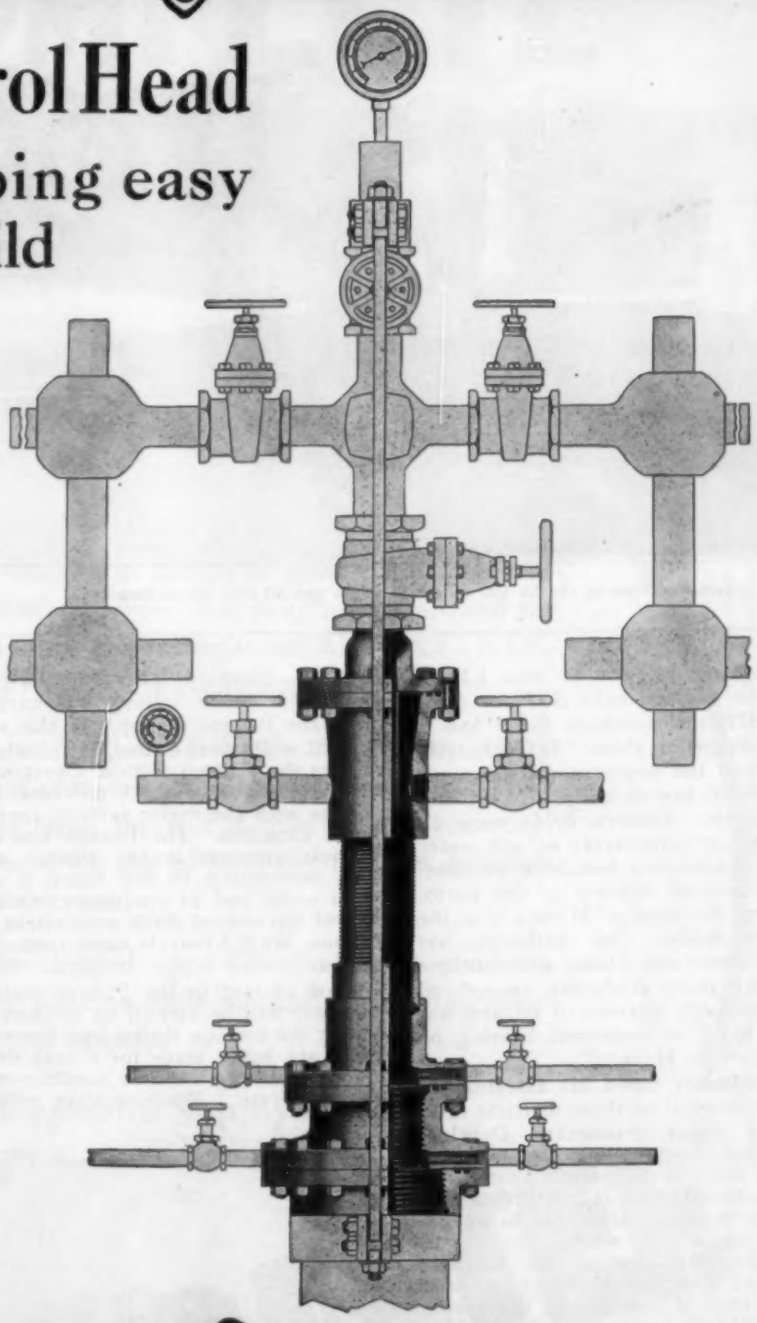
When topped, the crude from the southern district gives a greater gasoline yield. The gravity of this oil ranges from 19 to 26 degrees. Its yield is approximately as follows: gasoline, 12 per cent; kerosene, 5 per cent; fuel oil, 81 per cent; loss, 2 per cent. With more complete refining, this yield is increased to gasoline, 15 per cent; kerosene, 7 per cent; gas oil, 28 per cent; light lube distillate, 25 per cent; heavy



La Paz 1, which came in a short time ago in the hacienda Paciencia y Aguacate, Topila field.

Regan Control Head

—makes capping easy —prevents wild blowouts



Have you ever had one of your wells blow wild?

The Regan Control Head would have prevented it.

This Casing Head not only prevents loss of well and hazardous blowouts but makes capping easy. It adopts the simple flange principle—the safest, sanest method of capping ever devised. Wells ordinarily requiring 3 to 4 days to cap can now be capped in a fraction of the time—from 1 to 5 hours.

More than 50% of the wells at Signal Hill and Santa Fe Springs (California's high pressure fields) are equipped with this safety control device.

The Regan Control Head illustrated is the T & B Type. We also make this Head in the Santa Fe Type (without threaded nipple) and in the Ventura Type.

Send at once for descriptive literature which will give you full information regarding this remarkable control head.

Factory Representatives:

HILLMAN-COONEY (INC.)

506 Higgins Bldg., Los Angeles, Calif.

Regan

Forge & Engineering Co.

Manufacturers of Oil Well Equipment

Quality — Wrought on the Forge of Experience

San Pedro, California U·S·A.

Spectators viewing the La Paz as she blew gas and oil into the earthen tank.

lube distillate, 10 per cent; wax, 1.3 per cent; and gas and coke, 13.7 per cent.

In 1921, the northern fields had a daily average of about 130,500 barrels of oil, and the southern district averaged 395,500 barrels daily. By the end of 1922, the southern fields were all showing big percentages of salt water and encroachments had been encountered in several districts of the north. However, the hope of Mexico is in the northern fields. One authority has said, "Panuco and Ebano will continue for many years producing enough oil and a valuable mixture of oil and water to have an important bearing on production in Mexico."

He evidently based his assertion on the past records of these districts rather than future prospects. Developments are not proving the northern field to have great potentialities. Another authority has called attention to the fact that dry holes are being obtained consistently within the supposedly proven limits of the northern pools and also that the size of wells in this district is continually decreasing. This authority estimates potential resources of the northern district as not more than 75,000,000 barrels. However it must be remembered that this is only an estimate.

An idea of t decline in the production of southern fields can be obtained from a few figures on what this district has done recently. In 1921, 82 per cent of the total Mexican production came from the southern district. This percentage dropped to 75 in 1922, and preliminary figures place 42 per cent of the total as the record for southern fields during 1923. In the first nine months of 1923, the southern fields produced 48,731,392 barrels as compared with 158,439,703 barrels in the corresponding period of 1921.

Simultaneously with the decrease in light crude production, figures for heavy crude production have mounted steadily. Field statistics for 1923 indicate that much activity was carried on in the Panuco section. In this section 351 wells were drilled, 165 of which were in the Panuco section. Operations were carried on in 40 different haciendas with the major activity centering in Cacalilao. The Corona was the heaviest operator in the Panuco district, completing 16 dry holes, 8 salt water wells, and 24 producers. Of the 515,863 barrels of flush production in Panuco, 378,053 barrels came from Cacalilao.

Work started in the Panuco section last year will be carried on intensively during the coming spring and summer. Plans are being made for a rush drilling campaign as soon as weather conditions permit. Roads leading to and from the fields are thronged with tractors, carts and automobiles hauling material to new wells and locations.

During the whole of January revolutionary disturbances tied up activity to the extent that nearly all companies entirely suspended operations in southern fields. However, since conditions have changed for the better, all fields are busy again.

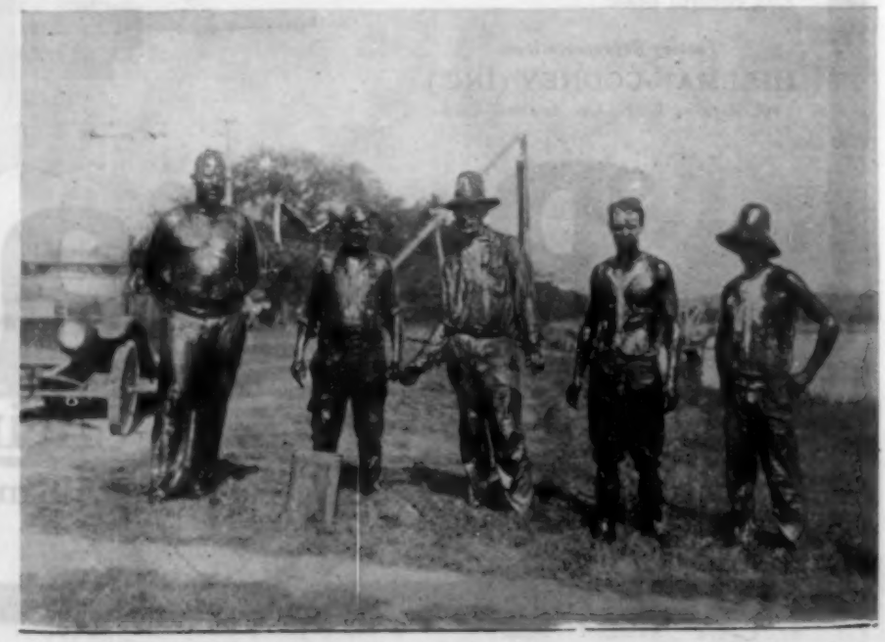
The Cacalilao sector is to come in for the bulk of this development work. During December of last year, 114 permits to drill were granted for wells in northern fields. Of this number 89 were for wells in the Hacienda of Cacalilao. Drilling programs of all the larger companies operating in both northern and southern districts are to be extensive.

Present plans of the International Petroleum Company call for 45 new wells in the northern district. Thirty of this number are to be in Cacalilao. This company is also planning 10 wildcat tests for the Hacienda of Naranjos in purely wildcat territory. At present, the International has a potential production of about 140,000 barrels daily in Panuco. This is at least 50,000 barrels more than any other company operating in the northern section of Mexico.

It is said that before the number of wells called for in this program is completed the International will have probably as many more under way in other parts of Cacalilao.

On February 1, the International began to meet the requirements of a contract with the Transcontinental to deliver 30,000 barrels of crude daily. This contract extends over a period of three years and calls for 32,800,000 barrels of crude oil. Besides this, the International will begin barging approximately 10,000 barrels of oil daily to Tampico where it has taken over 440,000 barrels of steel storage from the Continental Mexican Petroleum Company. At the present time, the International is producing approximately 100,000 barrels of oil.

Extensive operations in the Cacalilao



The drilling crew which brought in La Paz 1. They were colored temporarily—from oil.

COMPLETE DEPENDABILITY

—The superintendent in charge of production; the driller in charge of the crew; the roughnecks around the rig; they all know the necessity of "COMPLETE DEPENDABILITY" in the equipment they use.

—Gumbo Buster products, from the big flat top rotary to the smallest part, are completely dependable. They have been proving this for a quarter of a century. They have stood the test of time and met the demands of strenuous service.

—You, too, can depend upon Gumbo Buster products to last longer, keep on running, and require the minimum in general upkeep.

Republic Supply Co.
Distributors
Texas -:- Louisiana -:- Arkansas -:- Oklahoma

'GUMBO BUSTER' PRODUCTS

Rotary
Draw Works
Pump
Drilling Engine
Traveling Blocks
Etc.

AMERICAN WELL & PROSPECTING CO.
CORSICANA, TEXAS.
CALIFORNIA BRANCH—LOS ANGELES

Say you saw it in The Oil Weekly

Spectators viewing the La Paz as she blew gas and oil into the earthen tank.

lube distillate, 10 per cent; wax, 1.3 per cent; and gas and coke, 13.7 per cent.

In 1921, the northern fields had a daily average of about 130,500 barrels of oil, and the southern district averaged 395,500 barrels daily. By the end of 1922, the southern fields were all showing big percentages of salt water and encroachments had been encountered in several districts of the north. However, the hope of Mexico is in the northern fields. One authority has said, "Panuco and Ebano will continue for many years producing enough oil and a valuable mixture of oil and water to have an important bearing on production in Mexico."

He evidently based his assertion on the past records of these districts rather than future prospects. Developments are not proving the northern field to have great potentialities. Another authority has called attention to the fact that dry holes are being obtained consistently within the supposedly proven limits of the northern pools and also that the size of wells in this district is continually decreasing. This authority estimates potential resources of the northern district as not more than 75,000,000 barrels. However it must be remembered that this is only an estimate.

An idea of t decline in the production of southern fields can be obtained from a few figures on what this district has done recently. In 1921, 82 per cent of the total Mexican production came from the southern district. This percentage dropped to 75 in 1922, and preliminary figures place 42 per cent of the total as the record for southern fields during 1923. In the first nine months of 1923, the southern fields produced 48,731,392 barrels as compared with 158,439,703 barrels in the corresponding period of 1921.

Simultaneously with the decrease in light crude production, figures for heavy crude production have mounted steadily. Field statistics for 1923 indicate that much activity was carried on in the Panuco section. In this section 351 wells were drilled, 165 of which were in the Panuco section. Operations were carried on in 40 different haciendas with the major activity centering in Cacalilao. The Corona was the heaviest operator in the Panuco district, completing 16 dry holes, 8 salt water wells, and 24 producers. Of the 515,863 barrels of flush production in Panuco, 378,053 barrels came from Cacalilao.

Work started in the Panuco section last year will be carried on intensively during the coming spring and summer. Plans are being made for a rush drilling campaign as soon as weather conditions permit. Roads leading to and from the fields are thronged with tractors, carts and automobiles hauling material to new wells and locations.

During the whole of January revolutionary disturbances tied up activity to the extent that nearly all companies entirely suspended operations in southern fields. However, since conditions have changed for the better, all fields are busy again.

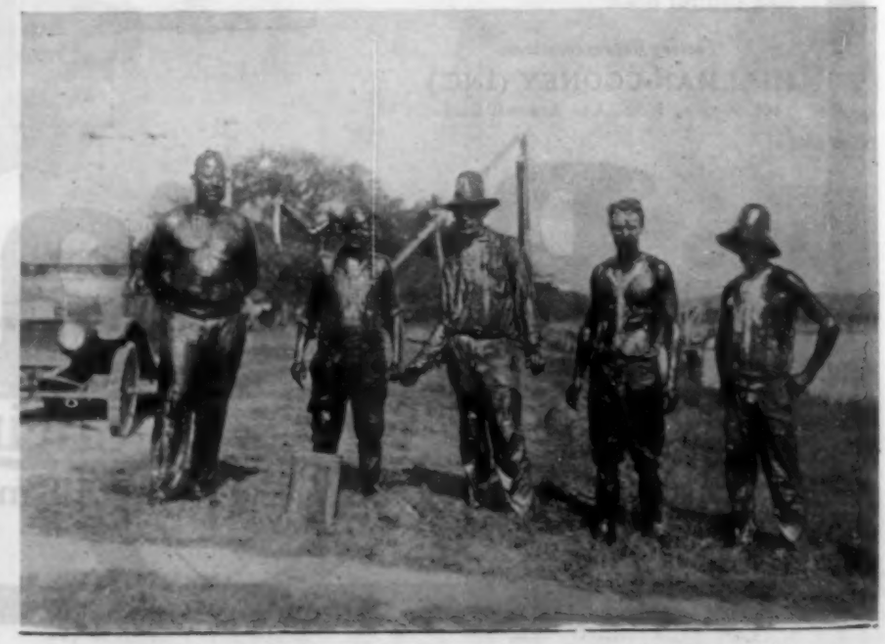
The Cacalilao sector is to come in for the bulk of this development work. During December of last year, 114 permits to drill were granted for wells in northern fields. Of this number 89 were for wells in the Hacienda of Cacalilao. Drilling programs of all the larger companies operating in both northern and southern districts are to be extensive.

Present plans of the International Petroleum Company call for 45 new wells in the northern district. Thirty of this number are to be in Cacalilao. This company is also planning 10 wildcat tests for the Hacienda of Naranjos in purely wildcat territory. At present, the International has a potential production of about 140,000 barrels daily in Panuco. This is at least 50,000 barrels more than any other company operating in the northern section of Mexico.

It is said that before the number of wells called for in this program is completed the International will have probably as many more under way in other parts of Cacalilao.

On February 1, the International began to meet the requirements of a contract with the Transcontinental to deliver 30,000 barrels of crude daily. This contract extends over a period of three years and calls for 32,800,000 barrels of crude oil. Besides this, the International will begin barging approximately 10,000 barrels of oil daily to Tampico where it has taken over 440,000 barrels of steel storage from the Continental Mexican Petroleum Company. At the present time, the International is producing approximately 100,000 barrels of oil.

Extensive operations in the Cacalilao



The drilling crew which brought in La Paz 1. They were colored temporarily—from oil.

COMPLETE DEPENDABILITY

—The superintendent in charge of production; the driller in charge of the crew; the roughnecks around the rig; they all know the necessity of "COMPLETE DEPENDABILITY" in the equipment they use.

—Gumbo Buster products, from the big flat top rotary to the smallest part, are completely dependable. They have been proving this for a quarter of a century. They have stood the test of time and met the demands of strenuous service.

—You, too, can depend upon Gumbo Buster products to last longer, keep on running, and require the minimum in general upkeep.

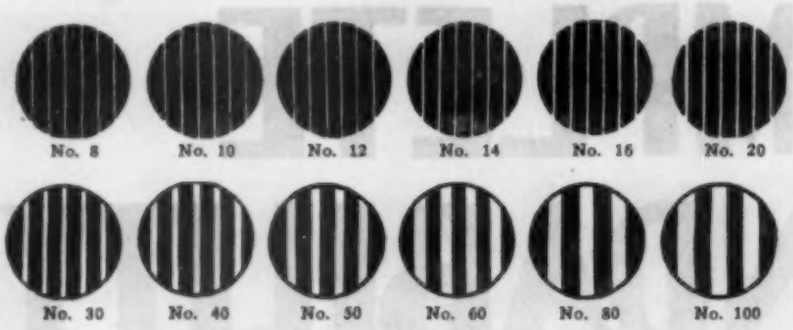
Republic Supply Co.
Distributors
Texas -:- Louisiana -:- Arkansas -:- Oklahoma

'GUMBO BUSTER' PRODUCTS

Rotary
Draw Works
Pump
Drilling Engine
Traveling Blocks
Etc.

AMERICAN WELL & PROSPECTING CO.
CORSICANA, TEXAS.
CALIFORNIA BRANCH—LOS ANGELES

Say you saw it in The Oil Weekly

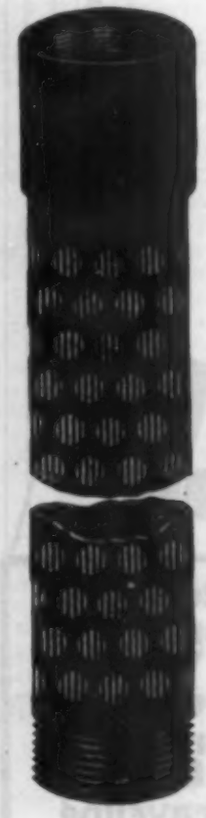


Actual Size of Wrought Brass Strainer Plugs.
Numbers indicate widths of slots in thousandths of an inch.

Built to Stand Up Under Rough Treatment

THE "McEVOY" WIRELESS WELL STRAINER

Patented



This Strainer is practically indestructable. It can be rotated, driven and pulled like blank pipe. You can even put on a bit and drill in.

When you use this strainer you eliminate sand and cleaning out troubles.

Each brass strainer plug is forced under heavy pressure down to shoulder and riveted firmly within the wall of the pipe. They're locked in so they CAN'T be disturbed or injured.

Write us your Strainer problems

McEvoy Wireless Satisfies

J. H. McEVOY & COMPANY

HOUSTON, TEXAS

USE "McEVOY WIRELESS" FOR STRAINER SERVICE

field are being planned by the Mexican Petroleum Company. This company has recently brought in several big wells in Cacalilao and is developing all its holdings there.

The Aguila Company, heretofore an operator in the southern district solely, has recently begun work on holdings in the Panuco section. This company has three wells going down north of the Rich-Mex lease in Cacalilao.

A survey of the northern district made on February 9 showed 78 outfits either in operation or rigging up in Cacalilao. The bulk of work going on in Mexican fields at this time is in Cacalilao. Developments within the last few months have brought production of the Panuco-Cacalilao district to such a figure that this section now ranks as the greatest single oil pool in the world. On December 29, production was approximately 1,944,000 barrels, weekly average; by January 5 this amount had dropped to 1,924,000 barrels and on January 17, the field was producing 2,382,000 barrels. These figures mean a daily average of approximately 340,000 barrels.

Present indications point to little wildcatting in Mexico this year. A few of the big companies operating there will doubtless attempt to find new production.

A stretch of country extending north from Panuco to the Tamesi River will probably come in for a little prospecting. This area really includes the present producing part of Cacalilao but there is much territory in the hacienda to the north that has not been tested. All told there is possibly an area of three or four hundred square miles of land in the haciendas of Corcovado and Chapacao that is considered prospective territory. More than one-half of this area is controlled by the Huasteca, but the Mexican Gulf, the Transcontinental and the Corona hold considerable acreage in the prospective district.

Wildcatting in Mexico is extremely expensive and because of the "spotted" production, surface geology has a small part in determining oil possibilities. However subsurface work has determined pretty accurately the kind of structure from which to expect production. Practically all Mexican oil in the southern district is found in the Tamasopa Lime and the general characteristics of the pools are the same in all districts.

Production in the Panuco district comes from the San Felipe lime and the fact that the oil exists in pools collected on top of bodies of water rather than in sands, makes it a "hit or miss" proposition altogether because there are large pools and small pools. This accounts for the great number of dry holes drilled in Mexico. Offset wells can not be counted upon to be producers.

Labor is plentiful in Mexico. Natives are employed to do much of the heavy work about the fields. Wages run practically the same as those paid in this country.

Transportation problems present the biggest obstacle in wildcatting. Roads are lacking and the cost of construc-

tion is great. It has been estimated that the average cost of putting down a wildcat test in Mexico is $125,000, and some wildcats have cost as much as $500,000. When one considers the large number of dry holes in Mexican fields, he begins to wonder whether or not the fields have really paid, notwithstanding the enormous quantities of oil produced. One authority specifically states that Mexican fields have not paid, and that a great deal more money has been sunk in dry holes than has been made from producers.

In a recent speech the president of the chamber of commerce of Tampico suggested that there is much undeveloped land in Mexico which has good oil possibilities. He pointed out that the southern fields cover a strip approximately 70 kilometers long and not more than two miles wide. When this small area is compared with the amount of unexplored land nearby, it is apparent that much prospecting can be done within the vicinity of proven fields, but the expense is so great and indications of successful wells so poor that it is doubtful if much money will be spent on these districts.

An operator who has spent several years in both northern and southern fields in Mexico had this to say about prospects for developing new pools: "There may be deep oil in Mexico. Many people believe that there is. But at the present time, the expense of bringing it to the surface is prohibitive. It may be that when the demand for oil increases until it is much greater than at this time, and when the product itself becomes more scarce, attempts will be made to go after the deep oil, but that will not be this year nor next."

Mexican crude is now bringing about 80 cents on board tankers at Tampico. When transportation costs and import taxes are added, the price of this oil in the United States is approximately $1.15. When the costs of transportation are deducted, the price of the oil is brought down to approximately 50 cents per barrel at the wells in Mexico.

The total amount of petroleum held in storage in Mexico on November 30 was 23,737,420 barrels. November exports totaled 12,054,000 barrels. In December the total number of barrels of oil sent out reached 13,563,000. January exports dropped to 9,910,519 barrels and the amount shipped out in February is expected to be much lower than this amount.

Most of Wells at Santa Fe Springs Will Pump and Are Being Produced

By W. E. Green

Los Angeles, Calif., March 1.—Probably one-half of the producing wells at Santa Fe Springs are on the pump, but in quite a few instances, the pump is being used to agitate and thus assist the gas to bring the oil to the top of the ground. It seems to be the concensus of opinion that the wells in this field when they quit flowing, will be successfully pumped, although in the congested districts the output may not be great. One prediction was made this week that in a few months wells that have been placed on the pump will produce at an average rate of 100 barrels a day for the field.

The low fluid level of the wells at Santa Fe Springs after they quit flowing and the high temperature at the fluid level has caused word to go forth to various sections of the United States that very likely the life of wells at Santa Fe Springs would be short—that they would not be successful pumpers, due to depth and other conditions just mentioned.

The writer recently was discussing this matter with Charles D. Wagner, sales manager for the Axelson Machine Company, headquarters at Los Angeles, and he offered to act as guide on a trip to Santa Fe Springs to disprove the report that the wells would not pump. Concrete evidence proved that a large number of wells are being pumped, and that they are producing all the way from 75 barrels to more than 400 barrels a day, although in most instances the wells producing more than 150 barrels a day were being agitated by the pump and thus made to flow with the assistance of the gas. But wells are being pumped successfully, and that report that a Santa Fe Springs well that quits flowing is dead is controverted.

Wells in this field are much like a woman—each one is different from the other, and each well requires different treatment. But the real pump student, who tries hard enough, and who sticks to the job long enough, has his reward in seeing the oil going into the flow tank. It's largely a question of having a real think box—and using it to the best advantage. There is equipment to do the work at hand. Mr. Wagner said that Axelson equipment would do the work—and he showed the writer several wells that were pumping with his equipment, and these wells were around 4600 feet deep, too.

Two wells were visited on the Southern California Oil Company's lease. No. 1 Baker is 4620 feet in total depth, has a string of three-inch tubing to 4200 feet, and a 2½-inch pump is being used. There are 98 feet of perforated pipe at the bottom of the hole. The well originally came in flowing 3600 barrels of oil and gradually declined to 700 barrels a day three months ago and then quit.

The well was placed on the pump and started out pumping and flowing 460 barrels and increased to about 500 barrels, 35 gravity oil and clean. The well is making about 130,000 cubic feet of gas. The pump is making 26 strokes to the minute with a 32-inch stroke.

The same company's No. 2 Baker nearby was drilled to a total depth of 4659 feet, with three-inch tubing run to 4300 feet and it refused to flow. Eighty feet of perforated pipe was used with 126 feet of liner. A 2½-inch Axelson pump is being used with the stroke the same as at No. 1. This well has about 34,000 cubic feet of gas a day and it has been producing around 200 barrels of clean oil for about two months, increasing from 125 barrels at the start.

A check of the Shell Company wells in the field showed that eight were on the pump, making an average of better than 130 barrels each. One instance of how the Shell wells are acting is given in the performance of No. 2 Thompson, and the action of the other seven is similar to a large extent.

No. 2 Thompson has a total depth of 4700 feet with the 2½-inch tubing reaching down 4300 feet. A 2½-inch pump is being used, with a 60 inch minus 5 plunger. The stroke is 32 inches, 26 to the minute. A Western gas engine, 40 horse power is used, and the oil is clean, gravity 35.2 degrees. The well has some gas, has been pumping from 140 to 185 barrels a day for two months and the rods have never been pulled. Mr. Wagner called special attention to the length of time the Axelson rods had been in service without pulling.

Here is the record of the other seven Shell Company pumpers, giving the number of the well, total depth of hole, size of tubing and length of tubing:

Lease—	Well	Total Depth	Tubing Inches	Tubing Depth	Production
G. H. N.	No. 1*	3821	2½	2590	88
	No. 12	4546	2½	3997	180
Slusher	No. 3	4675	2½	4254	160
	No. 4	4668	3	3987	85
	No. 8	4649	3	3995	142
	No. 11	4628	2½	4000	75
Thompson	No. 2	4700	2½	3708	140

*Bell sand.

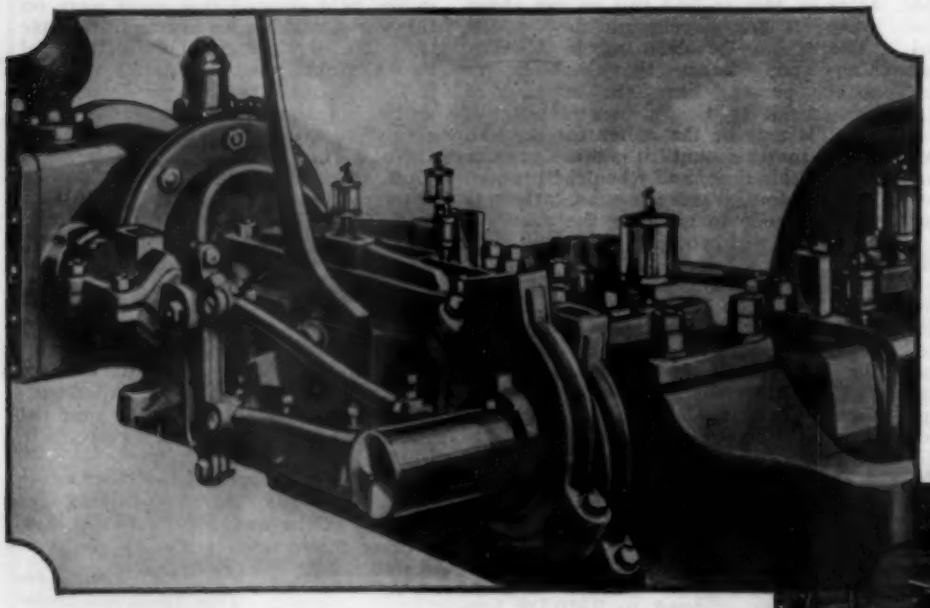
The fluid level can be judged from the instances given herein, by comparing the total depth with tubing used. The practice at Santa Fe Springs is to place the working barrel of the pump above the perforated casing. The temperature has been found to range from 140 to 160 degrees, at the point where the working barrel is placed.

In some instances pumps were placed where it was thought would produce results and as no oil came to the top, it was found after much experimenting that it was necessary to lower the tubing below the point where the fluid level was last located. It is thought that the gas had pushed up the fluid and as the gas was removed by agitation, the fluid level receded.

Some authorities contend that the gas now present serves to keep the ball from seating thus permitting the oil to drop back on the up stroke of the plunger. Some of the pumps use two balls, one on top of the other to solve this problem. It is contended that in such instances the well can be expected to show better results when the gas pressure further declines, which it must as time goes on.

Mr. Wagner pointed out that the high temperature had been causing a lot of trouble in freezing the plunger inside of the working barrel, but he says that his company has solved this problem and that plungers do not stick any more.

For the three inch pump, the working barrel is 10 feet in length with a plunger slightly less than seven feet in length. But when the very pleasant sales manager tried to go into the technical description of his pumps, the writer had to renig—went over his head. We saw the pumps working; we saw the oil coming out and we were convinced that Santa Fe wells are being pumped—and likely will be pumping for a long time to come.



Reversing Made Easy

The substantial construction of the Ajax reversing mechanism together with the improved adjustment of the link makes reversing an Ajax Drilling Engine positive and easy.

The curved link on the Ajax Engine is accurately broached to fit the roller which is hardened and ground inside and out. The roller pin is also hardened and ground. The reversing lever is more conveniently placed —throws easier and is built stronger.

Ajax Engines are easier to handle and more responsive.

Distributed by
National Supply Companies
In every oil field

Manufactured by
Ajax Iron Works
Corry, Pa.

AJAX DRILLING ENGINES

Insist on Genuine Ajax Replacement Parts

Use of High Speed Rotary Lowers Cost of Hole

A discussion of how some of the obstacles to speed may be overcome in drill practice

By Harry Pennington

THE COST of deeper wells has led to a general tendency toward higher rotative speeds. It is well known that higher speeds in other classes of work have been adopted with much success.

It is generally conceded that higher speed makes faster hole, but it has not been used because it has been thought that higher speed causes twisting off due to whipping of the pipe. When pipe whips in the hole there is danger of twisting off, but I shall endeavor to show that whipping is not necessarily an accompaniment of high speed, also that drill pipe is not stressed in digging light at higher speed as much as when digging heavy at low speed.

It is also generally agreed that drill pipe should be straight, truly straight, both in the body of the pipe and in the couplings and tool joints. A coupling tapped so that one joint goes off at an angle with the next joint has no place in any string of drill pipe and necessarily should be discarded for a true coupling. On the derrick floor, looking upward at a stand of fourbles, an untrue coupling can be seen and such couplings will lead to trouble, both from crystallization and from whipping.

Angle Joints

When there is an angle between two joints—that is, one joint does not continue in the same straight line as the next one, the weight of drill pipe beneath in the hole straightens out the bend. This, of course, stresses the pipe on the inside of the bend. Figure 1 shows a string of pipe setting in the hole with all the weight on bottom; figure 2 shows a string with the pipe hanging off of bottom. It is evident that the pipe on the side A and B, figure 1, is placed in a strain when the weight is lifted and the pipe is hanging as in figure 2.

These bends in the string are usually at the couplings, above or below, and twist-offs are usually at the coupling. Microscopic examination of the fibre of the pipe twisted off discloses crystallization on one side only, in every case examined, and bends in the pipe are evidently the cause of crystallization and twist-off.

Pipe Straightens

Now, even though the pipe is not straight, when it is suspended in the hole, it straightens out of its own weight and a rotative speed of as high as 500 revolutions per minute has been obtained thus, without whipping and without twist-off. But when the pipe is lowered onto bottom so as to take a heavy cut, the pipe will lay first on one side and then on the other down the hole, as shown in figure 1. Figure 1 shows a straight hole, while 2 shows a crooked hole with the pipe straight. Pipe laying against the hole as in 1 will whip around the hole, as can be seen from bright places rubbed on one side of the pipe only—the outside of the bend. When the hole is large and the pipe small, these crooks in the pipe occur at shorter intervals, and the pipe whips even at slow speeds. In a smaller hole, the crooks occur at longer intervals—that is, the crooks that rub on the outside of the bend of the pipe.

Fig. 1

But, lifting the pipe and straightening it out of its own weight, then lowering to take a light, fast cut, there are no crooks or bends.

If the hole is crooked as in figure 2, the pipe is worn bright all around its circumference and the bright places advance up the pipe as the hole is drilled deeper. It is obvious that whipping pipe, then, can be detected from pipe running straight but rubbing the hole.

We do not expect pipe to run exactly centrally in the hole all the way down because there probably has never been a hole drilled truly perpendicular all the way down. But, even though the hole is crooked, pipe need not whip necessarily—that is, straight pipe, since if it is suspended, it will lay against the side of the hole and run there, true, without whipping.

Let Down Lightly

In high speed drilling, the weight is let down lightly on bottom, whether drilling in hard or soft formations, since, when all the weight is on bottom, the speed must necessarily be slow for safety. A little judgment is necessary, of course, as to the best drilling speed.

Some formations are assisted in "standing up" if the pipe whips; whipping in this case compacts the wall, making the wall firmer, and this applies to the softer, loose sands of the Gulf Coast. Other districts, as the Mid-Continent, have formations that stand up with little difficulty and there is no necessity in running so as to make the pipe whip the wall.

In a previous article, I classified formations, for drilling purposes, into those that are cut up into fragments and flushed out whole, such as shale, slate, or rock, and those that must be cut up and mixed into slush, such as gumbo and tough clay. Gumbo drilling is done at higher speed, 200 to 300 revolutions per minute, by spinning the rotary with the pipe off bottom, then lowering with a fine feed, so as to take a very thin shaving. The bit whipping the shavings around the hole, mixes them rapidly into slush and the hole does not ball up and spudding is not necessary. After digging gumbo for several years at higher speeds, it is quite certain that hole is made faster and safer in this way than by digging heavy and then spudding.

Drillers Differ

The drilling characteristics of drillers differ materially. Making 9-inch hole in Wichita County, Texas, two drillers, one running days against the other at night, could always turn up 600 feet of hole the first twenty-four hours and 400 feet the next. Their method was to let the bit down slowly and run fast, but letting it down all the time. This rig had the highest sprocket ratios available and the rotary ran at a little more than 100 turns per minute. Two other drillers, using the same kind of rig, could make a little more than half the above amount of hole and their method was to dig hard and run slowly. Neither of the two rigs under observation had a twist-off and they drilled holes for the writer for three years. It is not necessary to say that the fast rig always got the important wells—offsets.

The rotary itself has a good deal to do with twisting off. A heavy table is harder to start and to stop, spins longer, and if the bit balls up, a heavy table may cause a twist-off due to the flywheel effect. Tables have been made much heavier, several times as much as formerly, but, generally, drill pipe used has not been improved as to strength in the same ratio. However, 6-inch drill pipe is being used more now than ever and some are even using 8-inch drill pipe for strength to do heavy work. In this case, of course, a heavy rotary would appear desirable, but the majority of holes are not drilled of such diameter to the producing horizon that 8-inch drill pipe can be used.

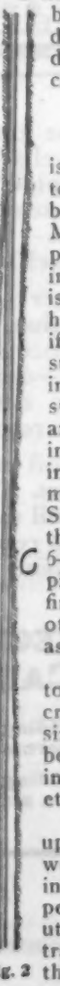


Fig. 2

Seamless Drill Pipe

Five-inch seamless upset drill pipe is coming into use, since it appears to afford a certain amount of flexibility necessary for fast work. Many drillers aver that 6-inch drill pipe twists off just as easily as 4-inch. Under certain conditions, this is undoubtedly true, but 6-inch pipe has greater strength than 4-inch and, if run as carefully, is of course not subject to twist-off as much as 4-inch. Six-inch pipe makes a straighter hole, since it is stiffer and the damage to drill pipe resulting from crooked hole is not present in the same field, as much in holes made with 6-inch as with 4-inch. Six-inch drill pipe can be run faster than 4-inch without whipping since 6-inch fills the hole more and the pipe cannot lay against the wall first on one side and then on the other going down the hole as much as with 4-inch.

But if 6-inch pipe is crooked due to imperfect collars or tool joints, crystallization can result more easily since the metal on the inside of the bend is stressed more in 6-inch than in 4-inch, due to the larger diameter of the 6-inch.

The speed of rotation depends upon the bit diameter somewhat, as well as upon the formation. An 11-inch bit at 200 revolutions, has a peripheral speed of 576 feet per minute; that is, the outer edge of the bit travels at that rate; a 9-inch bit has the same peripheral speed at 247

revolutions and a 7½-inch bit the same at 287 revolutions. These peripheral speeds are about as high as have been obtained at the present time.

A large hole requires more weight on the bit than a small hole. Consequently the pipe weight is held up off of bottom more in small holes than large and small holes may be drilled much faster than large, due in part, to this. Of course, less material is removed in small holes and pumps make a faster circulation, so that small hole is naturally made faster.

Boulders

In drilling 11-inch hole in lime rock interbedded with flint boulders, when the bit strikes a boulder over on one side, the drill pipe jumps so much as to cause a spudding effect if too much weight is let down. When the bit is near the surface, this effect can be seen, but deep down, this spudding effect is absorbed in the drill pipe up the hole and is not seen at the surface. At the surface the drill pipe may jump as much as two inches per revolution when all the weight is let down. Boulders are a hard proposition anywhere in the hole. Where boulders follow the bit down the hole, rapid spinning will grind them up somewhat. In one hole, 15 feet of boulders followed the bit down for 120 feet. The hole was in boulders for the 120 feet and more boulders were dug up but the depth of boulders over the bit did not increase and the only answer is that the speed of 200 revolutions per minute, 11-inch hole, simply ground them up and they did not accumulate in any greater quantity. Slower rotation seemed to gather more boulders in the hole.

In lime rock, the fish tail bit makes faster hole at high speed; the bit seems to scrape the cuttings off and mix them with water. These cuttings come out finely ground and settle out promptly. In digging this lime rock, rotating slowly, the hole would fill up with cuttings for a distance of three feet; cuttings so large that the pump could not flush them out in an 11 inch hole, but, running faster with a fine feed, the hole flushed clear and the bit lasted longer.

In most formations the bit makes hole more rapidly with fast rotation. Only one formation so far has shown that slow speed made faster hole, this being due to the formation being soft, the cuttings coming out in large fragments, and a slow speed and heavy feed was necessary to produce this kind of cuttings.

More Bits

A fast running rig will use more bits than a slow running rig, especially at the top of the ground. Where a slow rig is furnished with say 12 bits of one size, a fast rig must necessarily have more, two to three times as many, but each bit will make as much hole fast as slow.

Chain driven rotaries are not subject to high speed operation. With a table gear and pinion ratio of four and a half to one, the pinion runs at four and a half times the table speed, of course. If the table speed is 150 revolutions per minute, then the pinion speed is 675 revolutions. With a sprocket pitch diameter of 14 inches, the chain speed is 2475 lineal feet per minute. Roller chains are not usually recommended for speeds higher than 800 to 1000 lineal feet per minute. With a chain speed of 1000 lineal feet per minute, the rotary speed would be around 60 revolutions. These speeds are exceeded with consequent chain expense. Consequently, it is seen that high speed is possible only with shaft driven rotaries.

Take Your Own Pulse— Then Call the Oil Doctors

WHEN the gravity of the flow from your wells to the pipe lines falls below pipe line requirements and the emulsion content of your oil is causing trouble and loss—then you need the Oil Doctors at your well.

You need no longer be in doubt as to the best plan to pursue should you have "cut" or "roilly" oil. Science already has solved this problem for you—can step in and immediately give you a definite remedy, definite costs, and definite results to be obtained.

Place your "cut" oil problem before us—your official Oil Doctors. Without obligating you in any way, we will make a diagnosis of your crude and make a report to you covering all features of treatment, results to be obtained, and costs.

PETROLEUM RECTIFYING COMPANY OF CALIFORNIA

308 Union Oil Building
Los Angeles, California

338 Humble Building
Houston, Texas

PETROLEUM RECTIFYING COMPANY OF CALIFORNIA

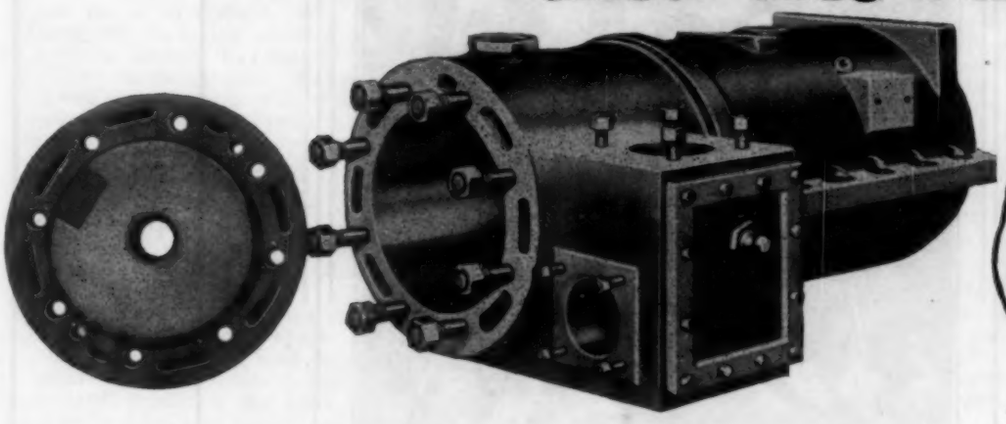
Oil Employes Take Part In Safety Movie

Houston, Texas, March 8.—Screen tests have been given and the selection of a complete cast will be made soon for the first motion picture to be made by the Petroleum Safety Council of the Mid-Continent Oil and Gas Association. This picture will be made in and around Houston, starting March 11. The cast of characters will be selected from among the different oil companies in Houston.

The plot of the picture is to deal with the first of the 17 fundamental causes of field accidents. The scenario has been passed upon by experts among whom is Charles B. Scott, manager of the Bureau of Safety of Chicago.

When the picture is completed, it will be shown in all fields of Texas where more than 50 men are employed. This picture is a part of the program of safety education that the Petroleum Safety Council is trying to put across in oil fields in the Mid-Continent area. Other pictures will be made from time to time.

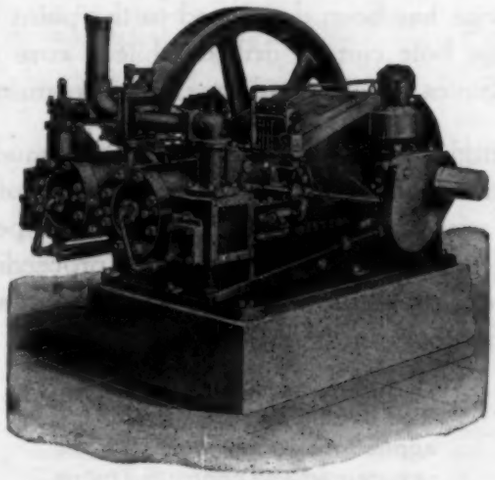
A different kind of Water Jacket ..... and the RESULT



WESTERN MACHINERY COMPANY

In design and construction, "Western" Engines are of the most modern type, the careful working out of improvements extending to and throughout every part, however small. As, for example, the method of water jacketing the cylinders.

"Western" cylinders are water jacketed over their entire length and provided with large hand hole plates for the removal of sand and scale if necessary. Special **split** water jackets construction is employed, properly packed and banded, allowing for full expansion and contraction of metal due to temperature changes.



The improved method of water-jacketing is but one of the many distinctive features of "Western" Engines which make them the outstanding power equipment for oil country service.

A Single Western Engine often has changed the complete power policy of some of the largest companies.

Western Machinery Company

General Offices and Factory: 905 North Main St.
Los Angeles, California.

San Francisco California	Bakersfield California	Tulsa Oklahoma	Okmulgee Oklahoma

SPENGLER

While You Drill We'll Take a Core

Our service has been developed to the point where a full gauge hole can be drilled while a core is being taken. Saves expense and time lost in reaming.

The Spengler Method of taking cores is modern, efficient and reliable, somewhat in advance of others, and we wish to advise our friends in the petroleum industry that we have brought legal proceedings and will rigidly prosecute any individual or organization infringing upon our patents or claims.

The double barreled principle applied to rotary core barrels is patented and controlled by us

Spengler Core Drilling Co.

Long Beach
Elm and Frankfort Sts.
Phones 618-339
653-474

Santa Fe Springs
Phone Whittier R-238

Torrance
Phone 140-J

Los Angeles
1036 A. G. Bartlett Bldg.
Phone Met. 7714

SPENGLER

Say you saw it in The Oil Weekly

Specifications for Steel And Iron Pipe

(Continued from page 14)

shall conform to the following regular practice:

15. (a) Each end of pipe shall be threaded and reamed to remove all burrs.

Threads

15. (b) The threads shall be in accordance with the American standard and cut so as to make a tight joint when the pipe is tested at the mill to the specified internal hydrostatic pressure. The variation from the standard, when tested with the standard working gauge, shall not exceed a maximum of one turn either way. For thread diameters of A. P. I. Casing, see list of sizes.

15. (c) The threads on pipe for rotary drilling purposes may be rounded top and bottom, when specified, with a radius of .017 inch on threads of eight pitch.

15. (d) Threads in couplings and on casing and pipe shall be so nearly alike in form and size, and so well finished, that joints can be screwed together with suitable lubricant, far enough to make a tight joint, and unscrewed four times without injury to threads.

15. (e) The Institute will provide a pair of master thread gauges (male and female) for each joint listed, to be made by Pratt & Whitney Company, or other gauge manufacturers to be selected by the American Petroleum Institute, and deposited with the Bureau of Standards at Washington, D. C., for reference in checking other gauges. Each manufacturer of A. P. I. tubular threaded material shall provide himself with gauges which have been checked with the institute's masters and certified by the Bureau of Standards. Each certificate shall identify a particular gauge by a serial number, and date of certification stamped on the gauge, and state its errors, if any, in pitch, lead, taper and angle of thread. No gauge which varies from the standard more than .001 inch in lead or in taper per inch of length, or in angle of thread by more than 30 minutes, shall be considered satisfactory. A gauge which is within these limits, but which varies from the master in pitch diameter by not more than one turn either way may be considered satisfactory, if its error in diameter is stamped on the gauge and proper allowance made for this error when using gauge. Gauging shall be done to conform with Standard American practice for line pipe, drive pipe, casing, tubing and drill pipe.

Taper Tests

15. (f) The taper of threads on both pipe and couplings shall be tested by approved methods at intervals sufficient to insure that the taps and dies are in proper adjustment.

The variations in taper shall not exceed the following limits:

	When taper per foot is specified as:		
	3/16"	3/8"	3/4"
For Low Carbon Steel and Iron (Maximum taper.....	1/4"	7/16"	13/16"
(Minimum taper).....	5/32"	11/32"	23/32"
For Medium and High Carbon (Maximum taper)....	1/4"	7/16"	13/16"
(Minimum taper)....	11/64"	23/64"	47/64"

Thread Protectors

15. (g) Solid tapped rings or split couplings, or other protectors to be approved by the American Petroleum Institute, shall be provided as thread protectors on all sizes, and shall be made and finished so as to prevent water from accumulating around the threads of pipe. Rejected couplings when cut in two may be used provided there are no bruises or imperfections that would damage the threads on the pipe. The thickness of the protectors shall be approximately that of the pipe on which they are used, unless of such form and make as to give equal or greater protection to the end of pipe and to the thread.

Couplings

15. (h) Each length of threaded pipe shall be provided with one coupling, having clean-cut threads of such a pitch and diameter as to make a tight joint. Couplings may be made of wrought iron or steel, seamless or welded. When couplings are made of steel they shall be electro-plated on the threads, heat treated or treated by some other method of manufacture which will minimize the chance of galling.

15. (i) The ends of couplings to be faced true and outside beveled so as to prevent catching on ends of the joints of pipe through which they pass; but enough thickness should be left at the end of coupling to safely support the weighth of the pipe on the elevator.

15. (j) No tapers of couplings to be secured by expanding.

15. (k) When couplings are screwed on at the mill a high grade lubricant shall be applied to couplings and pipe threads before making up joints; and to prevent rust, all exposed threads shall be thoroughly greased.

Alignment Test

15. (l) Couplings shall be tapped concentric so that the axes of the threads of the two ends are closely in line. Couplings shall be tested for alignment by screwing onto a threaded piece carefully centered in a lathe; in the outer end of coupling is screwed a lathe-turned piece which will give a measured length of about one foot on which the alignment of the coupling threads may be determined by an alignment indicator when rotated in the lathe. Other approved means of measuring alignment may be used. Couplings shall be in line with 1/4" in a length of 20 feet on all tubular goods except drill pipe. Couplings on drill pipe shall be in line within 1/2" in a length of 20 feet. At least one coupling shall be taken from each lot of 100 or less. In case this coupling fails, two more couplings may be taken from the same lot, each of which must be within the alignment specified, otherwise the lot shall be rejected. In any case the manufacturer may test rejected couplings individually if desired.

Marking

16. The length, the test pressure in pounds and class of material shall be stenciled on each length of pipe, and on sizes six inches and larger, except dipped or coated pipe, the weight of each length shall be stenciled. Approved abbreviations may be used. Weight per foot and A. P. I. brand to be stamped with steel stencils on each joint one foot from coupling on the shop end.

VI. INSPECTION AND REJECTION

17. (a) The inspector representing the purchaser shall have free entry, at all times while work on the contract of the purchaser is being performed, to all parts of the manufacturer's works which will concern the manufacture of the pipe ordered. The manufacturer shall afford the inspector, free of charge, all reasonable facilities to satisfy him that the pipe is being furnished in accordance with these specifications. All tests and inspections shall be made at the place of manufacture prior to shipment, unless otherwise specified and shall be so conducted as not to interfere unnecessarily with the operation of the works.

17. (b) Where inspector representing purchaser desires to witness these tests, reasonable notice shall be given of the time at which the run is to be made. Precautions shall be taken so that crop ends can be identified with respect to the length from which they are cut.

Rejection

18. Material which shows injurious defects subsequent to acceptance at manufacturer's works, or which proves defective when properly applied in service, may be rejected and the manufacturer shall be notified. No rejections, under these or any other specifications, are to be stamped with the A. P. I. stamp, or sold as A. P. I. pipe.

Production in Argentina To Be Expanded This Year

Washington, D. C.—Production in the government controlled oil fields of Argentina is increasing and will probably be further expanded during the current year, according to a report just received by the Petroleum Division of the Department of Commerce from the American Ambassador at Buenos Aires.

The output from the government reserve at Comodoro Rivadavia during 1923 is placed at 372,000 cubic meters (approximately 2,344,000 barrels), with 7300 cubic meters produced at Plaza Huincul. It is proposed to drill six more wells at Comodoro Rivadavia for experimental purposes, and 75 for production, or nearly double the number of wells drilled last year.

The present storage capacity at Comodoro Rivadavia is 111,300 cubic meters, and will not be added to this year, but at Plaza Huincul it is intended to install a tank of 10,000 tons capacity. For transport another tank steamer, with a capacity of 10,000 tons, will be provided and is expected to be put into service about the end of the year.

The proposed refinery at La Plata is expected to be working in about a year from the signing of the contract for construction, and will be able to refine 2000 tons of crude oil per day. The Plaza Huincul refinery is to be enlarged so it can supply the entire region and hinterland with kerosene and gasoline, besides supplying the requirements of the Southern Railway. Storage is to be provided at Bahia Blanca for 10,800 tons; Mar del Plata 8000 tons; and Concepcion del Uruguay, 8000 tons.

AXELSON MACHINE CO.
Sucker Rods · Pull Rods · Axelson and Amco Plunger Pumps (Working Barrels) · Noxon Stuffing Boxes · Other Pumping Equipment ·

JOSEPH REID GAS ENGINE CO.
Gas and Oil Engines · Pumping Powers · Receiving Boxes · Manifolds and Surface Equipment

DONOVAN BOILER WORKS
A.S.M.E. Code Boilers 120 to 150 lb. Wk. Pressure.
Regular Oil Country Boilers

J.P. RATIGAN
Beam Hangers
Polish Rod Grips and Clamps
Sucker-Rod and Tubing Hooks

GOUVERNEUR MORRIS has written a book said to explain why men hate the women they love. It strikes us that he hasn't undertaken such an impossible task. We all know men and women and even little children whom we love, but who have some traits we do not like.

Great organizations have personalities. There may well be something about the Frick-Reid Supply Company you do not like. But we hope the things about us that you can and do like greatly predominate.

Perhaps you have some one on your pay roll whom you trust absolutely. You can say to that person, "Do this!" and in due time it is done.

We want you to have that sort of confidence in us. We have in mind three qualifications: A widespread, flexible, HUMAN organization. Good merchandise. The WILL to serve.

We have come to be known as the most HUMAN organization in America. We have surrounded ourselves with the most able manufacturers of oil country equipment in this highly mechanical age. And there is nothing within the bounds of reason, whether it be profitable or otherwise, that we won't do for an Oil Man.

In Oil Country Equipment—the most HUMAN organization in America

Frick-Reid Supply Co.
Tulsa, Okla. Pittsburgh, Pa.
West of the Mississippi—Stores Everywhere

F-R
F-R Electric Light Plants—Trouble-free and Economical to Operate.

WHITLOCK CORDAGE CO.
Manila Drilling Cables
Pure Manila Bull Ropes etc.

JOHNS-MANVILLE COMPANY
Asbestos Packings
.....
ROEBLING Wire Lines

NATIONAL TRANSIT PUMP & MACHINE CO.
Steam and Power Pumps ·
Refinery and Pipe Line Equipment

WARREN
Steam Engines
.....
JONES & LAUGHLIN
Tubular Goods

BEAUMONT IRON WORKS CO.
Rotaries · Draw Works · Pumps · Crown Blocks · Traveling Blocks · Fishtail Bits · Stuffing Box Casing Heads · Tool Joints etc.

ROSSENDALE-REDDAWAY
CAMEL HAIR CAMEL BRAND BELTING
BELTING & HOSE CO.

F-R
F-R Service
Rubber Drilling & Pumping Belts

PERSONAL MENTION-MEN YOU KNOW

Dean J. Wolff, geologist for the Gulf Production Company and formerly stationed at Pecos in West Texas, has resigned to accept a position with the Mutual Oil Company of Denver, Colorado.

E. H. Moore has been elected president of the Okmulgee, Oklahoma, District Oil and Gas Association and Chas. I. O'Neill has been re-elected secretary.

C. P. McKeizer of the Western Iron and Foundry Company of Wichita, Kansas, recently made a business trip through the Oklahoma fields and made a stop in Tulsa.

R. L. Evans of the Ever-Grip Wrench Company of Chicago is on a business trip through the Mid-Continent oil country and reports his company is in production.

W. N. Alexander, general superintendent of production for the Mutual Oil Company in the southern division with headquarters at Fort Worth, was a business visitor in Wichita Falls last week.

A. A. Buschow, secretary-treasurer of the Bridgeport Machine Company, is away from his offices in Wichita, Kansas, on a tour through the Oklahoma fields, including a visit to the new Stroud district in Lincoln County.

George W. Giffert of the Phillips Petroleum Company is expected to return to Tulsa this week from Chicago.

Robert L. O'Brien of the Rig Equipment Company of Sand Springs, Oklahoma, is making an extensive stay in the Rocky Mountain region, having Casper as headquarters.

Ira W. Wetherill of the National Supply Company has returned to Independence, Kansas, after an extended tour through the Rocky Mountain section.

C. O. Stillman and other directors of Imperial Oil, Limited, have been re-elected at the annual meeting recently held in Toronto, Canada.

W. E. Frick, president of the Frick-Reid Supply Company, headquarters at Pittsburgh, headed a party who spent a week looking over California oil fields recently. Mr. Frick's party consisted of W. O. Platt, president of the Joseph Reid Gas Engine Company; M. L. Moore, vice president of the Frick-Reid Company; L. J. Black, president of the Beaumont Iron Works Company; and J. E. Swindler, also vice president of the Frick-Reid Company. Mr. Frick decided to spend a few weeks at Pasadena, while others of the party left February 23 for the East.

H. H. Maxson, secretary of the Independent Petroleum Marketers Association, headquarters at Los Angeles, has returned to his office after an illness that kept him at home for about 10 days.

Frederick G. Clapp, consulting geologist of New York City, has been making geological investigations in the oil fields of Taranaki, New Zealand.

W. H. GRAY

President of the Aztec Oil Company of Tulsa, Oklahoma, and the active head of the National Association of Independent Oil Producers.

S. M. Griswold, president of the Griswold Oil Corporation, has returned to headquarters at Wichita Falls, after taking a vacation of two weeks at Mineral Wells, Texas, accompanied by his wife.

J. R. Brooks of the Atlas Supply Company was away from company headquarters in Muskogee, Oklahoma, last week on a trip to Bristow and Tulsa.

W. L. Valentine, president of the Fullerton Oil Company and prominent in various business and social circles of California, recently was re-elected president of the Automobile Club of Southern California, probably the largest organization of its kind in the world.

W. T. Cushing, who built the producers pipe line from the San Joaquin valley oil fields to Port San Luis, is back in California after spending several years in various parts of the Mid-Continent.

Oscar H. Fogg of Chicago has resigned as secretary-manager of the American Gas Association to enter business in Baltimore, Maryland.

W. R. Capron, Wyoming agent for Sinclair Crude Oil Purchasing Company, is being transferred to company headquarters in Tulsa and will be succeeded in Wyoming by Wood E. White.

C. R. Krause, western manager of the Lee C. Moore and Company of Tulsa, Oklahoma, is in New York.

J. Edgar Pew, vice president of the Sun Company of Dallas, Texas, and Rush Greenslade of the Gypsy Oil Company of Tulsa will address the March 8 meeting in Tulsa of the Mid-Continent section of the American Institute of Mining and Metallurgical Engineers.

F. D. Bearly, vice president of the McGraw - Baughman - Bearly Lumber Company, is spending considerable time in Tulsa looking after the company's derrick business.

H. N. Cole of Tulsa, vice president of the Pure Oil Company, recently was at company headquarters in Columbus, Ohio, conferring with other officials.

H. H. McNeill, Oklahoma oil man, is to sail from New York during March for Peru in South America, where he will be employed by the Standard Oil Company.

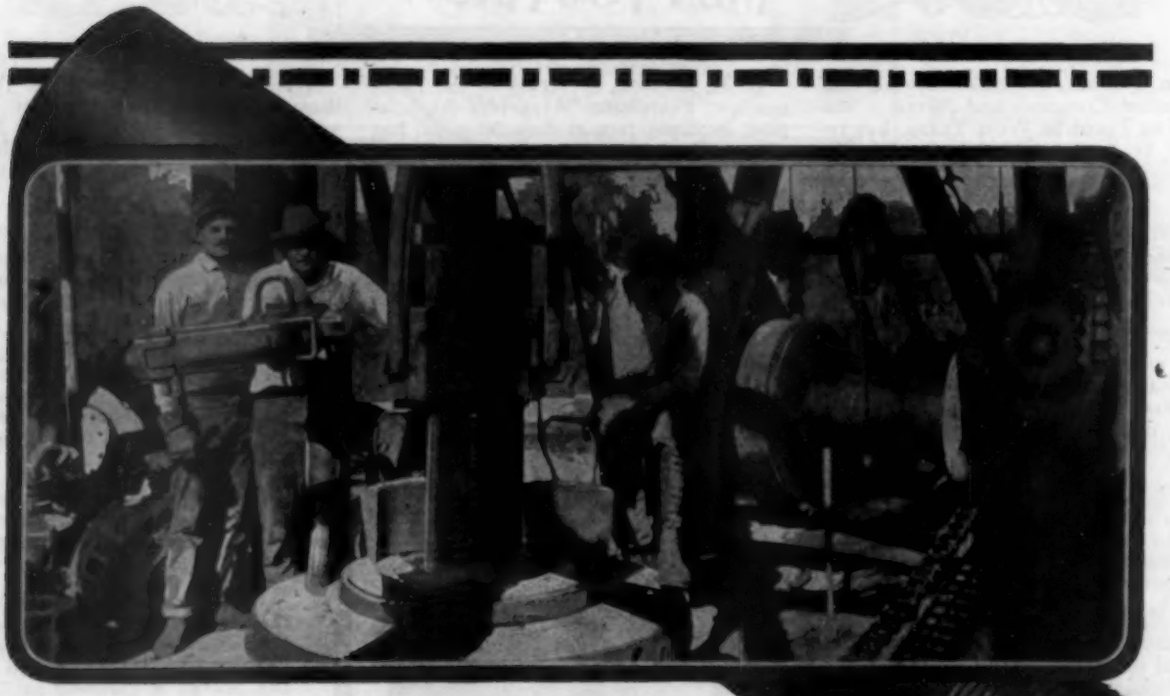
L. F. Baash of the Baash-Ross Tool Company of Los Angeles is on a tour of the Mid-Continent oil country.

Wood & Wood, geologists, announce the removal of their offices in Tulsa from 816 Daniel building to 302 Commercial building.

John Proper and Steve Sykes, well known drillers, are to sail from New York for Egypt where they will be employed by the Egyptian Oil Syndicate.

L. J. Drake has been re-elected president of the Galena-Signal Oil Company at the annual meeting recently held in Franklin, Pennsylvania.

Edward Prizer and other directors of Vacuum Oil Company have been re-elected at the annual meeting recently held in New York.



Men Who Compare Pipe Values Instead of Pipe Prices

give daily demonstration of the true economy of pipe that endures.

The average "Reading" user can relate many experiences which prove the value of "Reading's" time-tested resistance to corrosion and crystallization. He can tell you just how much "Reading's" ability to withstand the strains of rotary motion means in the saving of drilling delays and dollars.

He can point out the advantages of the superior threading qualities, and greater ease in cutting that "Reading" insures. He can convince you that Reading Genuine Wrought Iron Pipe has a life two to three times that of steel because actual comparisons of pipe performance under varying conditions of oil field service have already **convinced** him.

The best way to prove to yourself the value of Reading Genuine Wrought Iron Pipe is to see what it will do on your own lease. The next best, is to write for and read Bulletin Number One.

READING IRON COMPANY, Reading, Penna.

Largest Manufacturers of Genuine Wrought Iron Pipe in the World

OIL WELL SUPPLY CO., Distributors.

READING PIPE

GENUINE WROUGHT IRON

FIELD NOTES AND PRODUCTION STATISTICS

California Has Wealth of Empty Storage

Steel tanks and earthen storage built in profusion during flush production begging

Los Angeles, Calif., March 1.—A rough estimate made this week in Los Angeles places the empty steel and earthen storage in California at close to 25,000,000 barrels. A close check might run the figure above or below the amount named.

The American Petroleum Institute's report covering December in California estimated that 155,000 barrels of crude had been taken from storage during the last month in 1922, but the Institute's figures for January show that more than 2,000,000 barrels of crude had been added to storage in that month.

Storage Figures Revised

But in considering these statements it must be taken into consideration that during December a considerable addition to storage totals was made to take care of oil placed in storage in previous months and found on a later check. During January some oil was added to the figures for the same reason. In the face of this condition, it is doubted if much oil was actually and truly added during January. Private scouts during the past two weeks after carefully checking field runs, shipments and refinery runs reached the conclusion that several of the larger companies were actually withdrawing from storage. It is roughly estimated that the Standard of California during January just about held its own with reference to total storage of crude, and indications are that this company will withdraw from storage in February or March. There should be a general drawing upon stocks of crude in California in the course of the next sixty days, the withdrawals likely to become heavy by June or July.

CALIFORNIA FIELD OPERATIONS

The following table from statistics compiled by State Oil and Gas Supervisor R. D. Bush for California for the past several weeks gives a true insight into field activities:

Month of—	New wells started	Water shutoff tests	Deepening jobs	No. wells aband.
*June	120	195	59	22
July	94	145	46	23
*August	96	141	41	26
September	122	194	39	36
October	114	131	38	25
November	100	151	48	23
*December	105	181	37	32
Week ending—				
January 5	34	22	18	3
January 12	24	27	6	10
January 19	33	33	10	7
January 26	29	29	14	3
February 2	31	18	12	12
February 9	23	24	9	21
February 16	45	21	15	5
February 23	26	34	13	9

Most of the existing contracts calling for shipments of California crude to Atlantic Coast points are profit sharing contracts. This is especially true of the Standard and Petroleum Midway contracts, and both contracts call for large monthly shipments. Due to the fact that the contracts are profit sharing, there is little chance of another raise in crude prices in California until the Prairie boosts the price of Mid-Continent crudes. It is generally believed that California prices will be boosted within 48 hours after the next increase in Mid-Continent.

Opening Up Wells

An estimate this week was that fully two-thirds of the wells in the northern or heavy oil fields of California, were shut in when the Los Angeles Basin fields flooded the country with oil, were now open or would be in another 30 days. Sixty days should see every well in California capable of producing, throwing oil into the flow tanks. And by that time the production of the state will be considerably less than it is at this time. Crude prices at that time should also be more than at present and gasoline will be selling at least two cents more than now.

In the past two weeks two new fields have been proved in the Los Angeles

(Continued on page 39)

Receipts of California Oil at Atlantic Coast Ports

The following shows the receipts of California oil at Atlantic Coast ports by months with the current month given by weeks:

	Atlantic Ports						Gulf Coast Ports					
	Baltimore	Boston	New York	Philadelphia	Others	Total	Galveston	N. Orleans Baton Rge.	Port Arthur Sabine Pass	Tampa	Total	Total at all Ports
March	442,000	184,000	1,355,000	496,000	615,000	2,691,000	.....	.....	.....	.....	.....	2,691,000
April	105,000	256,000	2,456,000	502,000	320,000	3,639,000	.....	478,000	.....	.....	478,000	4,117,000
May	444,000	72,000	1,259,000	764,000	964,000	3,553,000	.....	300,000	53,000	.....	353,000	3,906,000
June	821,000	160,000	3,206,000	826,000	808,000	5,821,000	.....	664,000	.....	.....	664,000	6,485,000
July	443,000	75,000	2,068,000	741,000	699,000	4,080,000	.....	559,000	.....	.....	559,000	4,639,000
August	329,000	229,000	2,956,000	836,000	683,000	5,033,000	.....	970,000	70,000	.....	1,040,000	6,073,000
September	1,028,000	237,000	2,581,000	621,000	443,000	4,910,000	.....	703,000	.....	.....	703,000	5,613,000
October	779,000	224,000	2,503,000	779,000	429,000	4,714,000	.....	746,000	.....	.....	746,000	5,460,000
November	591,000	155,000	2,302,000	584,000	271,000	3,903,000	.....	935,000	.....	.....	935,000	4,838,000
December	454,000	215,000	2,901,000	813,000	753,000	5,136,000	.....	729,000	.....	.....	729,000	5,213,000
January	619,000	77,000	2,802,000	659,000	503,000	4,660,000	.....	615,000	.....	.....	615,000	5,275,000
February 2	75,000	.....	525,000	143,000	.....	743,000	.....	245,000	.....	.....	245,000	988,000
February 9	70,000	145,000	446,000	311,000	75,000	1,047,000	.....	164,000	.....	.....	164,000	1,211,000
February 16	181,000	.....	850,000	124,000	.....	1,155,000	.....	327,000	.....	.....	327,000	1,482,000
February 23	.....	.....	990,000	264,000	.....	1,254,000	.....	74,000	.....	.....	74,000	1,328,000

Note—Figures by American Petroleum Institute.

Imports of Petroleum at Principal United States Ports

The following represents the total imports of crude oil for the month with the current month given by weeks:

	Atlantic Ports						Gulf Coast Ports					
	Baltimore	Boston	New York	Philadelphia	Others	Total	Galveston	N. Orleans Baton Rge.	Port Arthur Sabine Pass	Tampa	Total	Total at All Ports
January	475,000	745,115	1,636,020	641,006	1,163,120	4,760,155	1,053,000	733,284	1,182,654	40,000	3,011,953	7,772,108
February	421,000	553,510	1,163,971	570,128	1,150,819	3,859,429	1,079,000	951,818	1,019,000	167,000	3,216,818	7,076,247
March	265,000	450,000	2,020,139	848,000	1,406,577	5,045,924	1,857,000	1,611,794	1,453,000	240,000	5,162,794	10,208,718
April	370,000	669,000	1,074,000	625,000	591,000	3,319,000	1,615,000	1,020,000	1,135,000	168,000	4,362,500	7,681,500
May	344,000	515,000	1,026,000	437,000	615,000	2,937,000	1,351,000	910,000	1,184,000	127,000	3,582,000	6,519,000
June	314,000	421,000	1,791,000	755,000	809,000	4,090,000	1,515,000	1,142,000	1,062,000	229,000	3,948,000	8,038,000
July	287,000	465,000	1,806,000	448,000	898,000	3,876,000	1,471,000	1,120,000	833,000	92,000	3,516,000	7,392,000
September	268,000	565,000	1,744,000	660,000	686,000	3,923,000	1,776,000	1,397,000	880,000	224,000	4,277,000	8,202,000
October	365,000	292,000	1,194,000	536,000	816,000	3,203,000	988,000	1,330,000	380,000	50,000	2,248,000	5,951,000
November	223,000	395,000	1,194,000	576,000	757,000	3,145,000	1,478,000	1,000,000	551,000	111,000	3,287,000	5,432,000
December	474,000	574,000	1,243,000	606,000	1,024,000	3,917,000	2,019,000	1,832,000	933,000	259,000	5,043,000	8,960,000
January	398,000	531,000	1,060,000	376,000	949,000	3,314,000	1,295,000	887,000	689,000	15,000	2,936,000	6,250,000
February 2	166,000	60,000	50,000	113,000	130,000	519,000	469,000	353,000	.....	104,000	926,000	1,445,000
February 9	95,000	209,000	65,000	300,000	178,000	847,000	243,000	299,000	24,000	.....	566,000	1,413,000
February 16	65,000	64,000	301,000	45,000	343,000	818,000	516,000	214,000	261,000	71,000	1,062,000	1,880,000
February 23	194,000	194,000	223,000	.....	70,000	681,000	330,000	418,000	240,000	20,000	1,008,000	1,689,000

NOTE—Figures by American Petroleum Institute.

(U. S. Completions Begin Page 49)

Average Daily Production for all U. S. Fields

California

Los Angeles, Calif., March 1.—The daily average production for the California fields the past week, compared with the previous week, with number of producing wells in several fields, was about as follows:

	Last Week	Prod. Wells	Previous Week
Long Beach	225,000	368	225,000
Santa Fe Springs	99,000	313	100,000
Huntington Beach	58,000	252	60,000
Torrance	26,000	141	28,000
Compton	2,600	3	1,900
Others	235,500		234,800
Total	646,100		669,950

Oklahoma

	This Week	Last Week
Burbank	98,610	102,375
Bristow	50,210	50,100
Cushing	24,900	24,865
Osage (outside Burbank)	30,450	30,400
Okmulgee	19,800	19,765
Hewitt	26,800	25,950
Healdton	16,500	16,500
Wewoka	9,595	9,790
Tonkawa	37,335	38,470
Duncan and Walters	10,000	10,050
Other fields	87,650	86,750
Totals	411,850	415,575

Kansas

	This Week	Last Week
Eldorado	16,720	16,740
Greenwood	15,110	15,000
Elbing and Peabody	9,840	9,860
Fox-Bush	5,960	5,975
Blankenship	3,575	3,580
Augusta and Douglass	3,580	3,590
Florence and Covert	2,880	2,900
Leon and Weaver	1,250	1,250
Other fields	10,000	9,950
Totals	68,915	68,845

Arkansas

Smackover	98,230	99,740
El Dorado	14,430	14,475
Stephens	2,630	2,600
Irma	995	1,010
Totals	116,285	117,825

California Fuel Movement To Foreign Ports Increases

Los Angeles, Calif., March 1.—Shipments of California crude from Los Angeles harbor the past week showed a decline when compared with the previous week, but the movement of fuel oil to foreign ports showed an increase. Only 24 tankers departed last week against 29 the previous week.

Crude oil to the amount of 1,041,311 barrels moved to all points against 1,661,607 barrels the previous week. One tanker for New York carried 3518 barrels of fuel, the only movement of this character to Atlantic Coast points. Kerosene to the amount of 7654 barrels went to foreign ports.

The record in barrels for the past week was as follows:

	Last Week	Previous Week
Tankers departed	24	29
Total crude moved	1,041,311	1,661,607
Total fuel	487,268	237,848
Total gasoline	114,523	74,683
Crude to Pacific	269,142	640,293
Fuel to Pacific	73,250	25,949
Gasoline to Pacific	59,523	.....
Crude to Atlantic	745,384	924,411
Gasoline to Atlantic	.....	.....
Fuel to foreign	410,500	311,899
Kerosene to foreign	.....	.....
Gasoline to foreign	55,000	74,683

Louisiana

	This Week	Last Week
Haynesville	20,100	20,265
Caddo	10,460	10,505
Homer	8,365	8,405
Bellevue	6,300	6,310
Vinton	5,200	5,525
Bull Bayou	5,470	5,475
Elm Grove	1,005	1,020
Evangeline	575	510
Edgerly	650	490
Anse La Butte	20	20
Totals	58,145	58,525

Texas

NORTH-CENTRAL

	Past Week	Prev. Week
Corsicana-Powell	112,625	103,400
Mexia	34,030	34,225
Archer County	34,050	23,225
Burkburnett	20,690	22,110
Stephens County	19,675	20,355
Electra	18,775	19,105
Desdemona-Gorman	8,805	8,055
Ranger-Eastland	7,570	7,515
Young County	4,195	4,155
Moran-Shackelford County	3,835	3,795
Currie	3,450	3,685
K-M-A	1,330	1,340
Iowa Park	1,255	1,310
Strawn-Palo Pinto County	875	870
Mitchell County	740	720
Brown County	355	350
Petrolia-Clay County	290	285
Richland	125	360
Carson County	210	210
Reagan County	210	205
Coleman County	145	140
Thrall-Williamson County	75	70
Jack County	35	35
Totals	273,345	255,400

GULF COAST

Hull	28,000	26,750
Goose Creek	14,130	13,050
West Columbia	13,240	13,740
Orange	9,260	10,100
Humble	4,500	5,275
Sour Lake	4,760	4,900
Damon Mound	1,620	1,750
Saratoga	1,540	1,560
Batson	1,210	1,180
Spindle Top	930	840
Blue Ridge	640	720
Pierce Junction	550	635
Nacogdoches	110	110
Barbers Hill	250	245
Markham	85	90
Richmond	85	400
Dayton	65	65
Stratton Ridge	35	35
Hockley	35	30
High Island	20	25
Total Gulf Coast	81,065	81,500
Total North Texas	273,345	255,405
Luling (Caldwell County)	20,000	20,000
Mirando	4,500	7,500
Somerset	3,050	3,050
Rockdale-Minerva	575	575
Total for Texas	382,535	368,030

Condensed U. S. Production for Twelve Months

(Stated in Barrels)

This table is carried each week by The OIL WEEKLY, and shows daily production average for each state or section. Figures for Oklahoma, Kansas, Texas, Louisiana, Arkansas and Mountain States are compiled by The OIL WEEKLY, while estimates for California and Eastern States are furnished by the American Petroleum Institute.

Daily average for month	*Mid-Continent	North Central Texas	Texas Coastal	†Texas Total	Kansas	Okla.	Louisiana	Eastern States	Wyoming-Montana	Calif.	Ark.	U. S. Total
August	726,981	217,208	105,966	323,148	89,998	419,775	97,936	120,750	83,938	375,000	28,834	1,618,765
September	716,107	207,467	107,790	314,932	89,760	418,880	101,857	114,200	80,490	387,000	33,135	1,540,371
October	714,906	200,465	115,130	316,370	90,404	424,037	97,502	116,375	86,412	423,750	34,127	1,489,005
November	711,521	199,223	114,150	388,376	91,098	421,200	93,410	116,375	106,092	450,000	77,225	1,668,776
December	692,702	170,187	111,819	242,010	87,508	435,007	86,513	114,900	108,679	484,000	107,732	1,722,349
January (1923)	708,372	184,885	115,628	304,790	86,720	436,767	81,205	113,500	123,254	517,500	111,920	1,770,645
February	712,007	180,364	96,984	286,493	85,298	446,345	78,068	112,500	110,328	587,500	101, 346	1,805,496
March	720,287	184,582	89,873	283,355	86,012	449,693	75,352	109,900	118,580	653,000	108,630	1,888,522
April	756,381	192,148	92,320	293,780	86,433	478,100	76,854	424,000	127,860	711,250	102,099	1,983,026
May	793,774	203,776	90,905	304,032	85,500	504,498	75,368	109,125	125,680	700,125	109,033	2,010,840
June	824,297	217,162	92,240	320,250	85,255	521,880	72,745	110,300	129,559	773,000	133,592	2,159,818
July	866,665	274,330	91,795	378,335	84,785	508,403	70,085	113,000	137,300	851,000	132,395	2,275,305
August	826,982	278,574	94,398	393,780	82,741	464,416	68,739	112,625	137,909	866,250	123,000	2,251,966
September	830,517	371,730	93,649	443,461	77,078	421 763	68,935	108,400	157,742	859 700	127,955	2,269,176
October	876,059	408,036	84,120	511,483	71,362	371,657	65,305	107,750	139,912	823,125	125,145	2,240,741
November	935,975	479,383	82,747	580,700	69,337	387,253	64,701	108,125	151,225	768,275	124,188	2,253,806
December	729,591	283,130	78,033	378,478	68,444	378,017	61,138	110,300	146,770	723,845	120,049	1,987,841
January	685,540	243,120	75,085	334,485	67,815	374,605	59,125	108,000	144,735	698,965	114,255	1,900,985
February 2	720,165	253,935	78,040	351,500	67,775	398,455	59,745	107,500	140,100	685,000	112,600	1,922,675
February 9	729,895	255,800	83,260	366,560	67,770	406,325	58,610	104,000	140,000	681,750	114,405	1,939,420
February 16	729,852	251,587	81,723	365,307	68,345	409,920	60,915	103,000	145,000	669,950	114,075	1,936,512
February 23	739,820	255,400	81,500	368,030	68,845	415,575	58,525	103'500	142,000	665,000	117,825	1,939,300
March 1	754,110	273,345	81,065	382,535	68,915	411,850	58,145	100,000	129,550	646,100	116,285	1,913,380

*Includes North-Central Texas, Kansas, Oklahoma.
†Beginning February, 1923, Somerset, Mirando, Rockdale and Luling production included.
NOTE—Mexia production included in North Central Texas.

California Has Wealth of Empty Storage

(Continued from page 37)

Basin. One of these, called Compton, now has three producers and should have three more in that number of weeks. The most recent field is that proved by the Union's No. 1 Rosecrans. During the past week some thought has been given to names for these new fields.

Naming New Fields

State Mining Bureau officials are inclined to designate the Compton field as the Dominguez field, in an effort to retain the old name of Dominguez Hill, historic during early Spanish days. Most of the officials of oil companies operating in that field are willing to so designate the field. It has been about decided to designate the new field proved in Union's No. 1 Rosecrans as the Rosecrans field, in honor of the owner of the land, who has persisted for years in the belief that a field was located on his land.

The Union's No. 1 Rosecrans was wet when tested and the casing is now being recemented. It is hoped that another test for water shut off can be made early next week. The General Petroleum holds some leases in the vicinity of the new well and doubtless will start drilling in the next week or so.

Casinghead Plant

The Western Gasoline Company has erected a natural gasoline plant in the Compton field, or rather the Dominguez field, which should be in operation next week. About 16 wells are now drilling in this field and during the past week the Shell Company completed its first producer for the field. This was Reyes 1, which was completed at 4095 feet for 1250 barrels of 31.7 gravity oil. The General Petroleum's No. 1 Gardena, the well which found a sand about 1000 feet deeper than in the other wells, is now making about 350 barrels of oil from a total depth of 4860 feet, but it is still wet. It has not yet been decided from just where the water is coming. It may be edge water.

Although there were 10 completions at Torrance the past week, the total flush production was only 3625 barrels for all of the wells. The Shell completed its first producer at Torrance, which made 700 barrels at 3790 feet. U. S. Royalties' No. 13 well in that field was the best of the week, making 1100 barrels at 3775 feet.

Lots of Pipe Lines

Torrance is now well supplied with pipe line systems, nine companies having gathering systems in the field with seven lines prepared to carry oil from the field to connect with tank farms or with main lines nearby. The gathering systems are operated by the Standard, Union, Associated, General Petroleum, Shell, Pan American, Julian, Petroleum Midway and Seaboard. All of these have lines from the field to tank farms or main lines except Union and Shell. The Union is expected to arrange shortly for a line to connect with one of its main lines and doubtless the Shell will do the same. The combined lines have a daily capacity of better than 100,000 barrels against a daily production last week of 26,000 barrels.

Torrance now has 183 wells drilling, 110 of which are below 3000 feet. There are 141 producers in this field.

California Gasoline Stocks Showed Gain During January

Los Angeles, Calif., March 1.—Gasoline stocks during the month of January showed a gain of 9,501,512 gallons, making the stocks at California refineries on last day of January 201,281,887 gallons, according to report of Bureau of Mines for California covering operations during January, this year.

Forty-two refineries reported to the bureau, the plants having a combined daily capacity of 577,970 barrels of crude, but the reports indicate that they ran at 66.7 per cent capacity, only running an average of 385,392 barrels of crude daily to stills.

The output of gasoline during January is given at 109,307,994 gallons, a daily average of 3,526,064 gallons. Kerosene production in January was 24,877,077 gallons, a daily average of 802,486 gallons. Kerosene stocks declined to 28,336,847 gallons in January.

Production of gas and fuel oils during January in California is given at 334,064,844 gallons, showing a production decrease of 17,160,118 gallons during the month. The stocks increased 7,826,344 gallons during January.

Lubricants produced during January amounted to 9,390,565 gallons, a decrease of 195,687 gallons when compared to figures for December. Stocks declined slightly to 14,319,970 gallons.

London, Eng., Feb. 27.—In the event present negotiations are consummated looking to a merger of Royal Dutch-Shell with the Burmah and Anglo-Persian companies it is understood the British are to have control.

RENEW YOUR LINERS

Install a new liner when your old one dulls. You can do it at less cost than resharpening, and decidedly less time and inconvenience.

H. & W. Rotary Slips

(Patented)

are designed and constructed to enable the operator to remove an old and replace a new liner in a short space of time, by just taking out two cap screws in each slip.

The bodies of the slips are extra long, insuring a full firm seat between rotary table bushing and pipe. A long, convenient handle of steel, bent to facilitate ready handling of these slips is another feature adding to its popularity.

Baash-Ross Tool Co.

5512 Boyle Ave., Los Angeles, Calif.

Phone Humboldt 3933 P. O. Box 694, Houston, Texas

"Almost Perfect Fish Fossils in our Cores"

A Sullivan Drill Core from Texas (3700 feet)

Geologists recording the work of **Sullivan Diamond Core Drill**

in a certain foreign oil district were enabled by means of the complete rock cores obtained to send home full and accurate reports of all strata penetrated. For example:

"OCT. 24,—Gray, fairly hard shale, compact, not well bedded, with mollusks and fish scales.

"OCT. 25,—day shift, shale; at 3383 feet, 2 small almost perfect fish fossils.

"NIGHT SHIFT, shale with thin, well bedded horizons, contains a few fish scales and some mollusks."

Can you get consecutive, unquestionable records like this with your drills?

Ask for Booklet 42124 "Oil Finding up to Date."

Sullivan Machinery Co.

122 S. Michigan Ave., Chicago

Mutual Buys Interest In New Tulsa Pool

Tulsa, Okla., March 5.—Through purchase from Munn Brothers and Peer Oil Corporation and Lorraine Petroleum Company, the Mutual Oil Company has acquired interest in the Country Club pool, for which has been paid approximately $2,000,000.

The properties acquired from the Peer and Lorraine companies consist of 320 acres with five producing wells, making approximately 1200 barrels daily, for which the price is reported at $1,000,000.

Three-quarters interest in 345 acres was acquired from Munn Brothers.

There are seven producing wells on these tracts with a total average daily production of 750 barrels each. For this property, the Mutual company has agreed to pay a sum of $900,000, of which $500,000 is to be in cash and the remainder in oil produced.

The transfer of this property has been delayed on account of the fact that two of the wells are leaking gas from the Burgess sand above and until this is adjusted, definite information as to the time of final consummation of the deal will not be known.

It has also been reported that the Mutual Oil Company has made an offer to the Sapulpa Refining Company of 50 cents per share basis for their plant at Sapulpa. In the event this deal goes through, the oil from the Country Club pool will be run into the stills of that refinery.

LaFollette Seeks Oil Control by Government

Washington, D. C., March 4.—The setting up of a federal regulating board fashioned on much the same order as the Federal Trade Commission, that would have power to direct the supply of petroleum and its products and to dictate prices thereon, is a part of the proposed legislation to be introduced in the present congress by Senator La Follette of Wisconsin, it is learned on good authority. Senator LaFollette feels that the present oil investigation disclosures will lend weight to his proposed bill.

It is understood that the Senator from Wisconsin, who was quite active last year in the federal investigation of crude oil and gasoline prices throughout the country, has framed his bill so as to bring within its scope the entire petroleum industry in the United States.

Under the terms of the La Follette bill to be introduced, the proposed federal commission would be given authority to assume charge of oil found on public domains and provision also is made for the acquisition of oil lands now owned by private parties, at least enough of them to give the commission control of the petroleum market in this country.

Casper, Wyo., Feb. 25.—Formation of a new strong independent in the Rocky Mountain section likely will be the outcome of a merger now proposed between Marine Oil, Glenrock, Royalty and Producers, Wyokans, Wolverine and Western Pipe Line Companies. The merged concern would be known as the Western Oil Company.

Why is Seamless Casing Better than lap weld Casing?

Ask us—

We have some data on the merits of Seamless Casing as compared with lap weld that will interest you—

Drop us a line.

Standard Seamless Tube Co.
Pittsburgh, Pa.

Burbank Production Below 100,000 Barrels

Two drilling wells have been abandoned and there is speculation as to effect on sale

Tulsa, Okla., March 5.—As the Osage auction nears the date of sale, the interest seems to be turning in the direction of Burbank. Production in this field has dropped below the hundred thousand barrels daily mark for the first time in four weeks. Estimates of 120,000 barrels per day which was placed as a maximum for the Burbank pool were apparently high for it now appears that it will be some time before it is reached.

Phillips Petroleum Company has abandoned their No. 1 well in the northeast corner of the northwest of section 3-27-5, after drilling to a depth of 2972 feet. The Roxana Petroleum Company ordered the abandonment of their No. 5 in the southwest corner of the northwest of the northeast of section 4-27-5. The question is, what effect will these dry holes have on the sale of the Burbank leases?

The Sayre pool in Beckham County comes into the limelight again when Wallace and Googan encounter a gas sand at 2615 feet that is good for 33,000,000 cubic feet. No. 1 Ensey is located in the center of the northwest of the southwest of the southwest of section 21-9-23. The gas will be mudded off if such is possible and the well drilled deeper. There was no show of oil in the sand. The Carter Oil Company topped a good sand at 2962 feet in their No. 2 Windle in the center of the northwest of the northeast of section 31-9-23 in the Sayre pool. The well flowed 500 barrels during the first eight hours.

Just two miles west of the Country Club pool of Osage County, Tulsa's back door oil pool, Alexander-Shakely Petroleum Company has a well which will yield about 30 barrels of oil per day. It is in the northwest of section 17-20-12. In section 9-20-12, a little north of the Alexander-Shakely, the Barnsdall company topped a sand at 1982 feet and it made 245 barrels of oil after being drilled in 12 feet. The Barnsdall well is shown as their No. 22 in the northwest of the above named section.

The Alcorn Oil Company's wildcat test in section 12-26-2 west, is swabbing about 200 barrels per day. This company has made another location in the northeast corner of the northwest of the northeast of section 12-26-2 west.

Stroud is not the only place in Lincoln County that is causing the attention of oil operators to be drawn to that section. Horton No. 1 of Green and Hines is reported as a well good for 5,000,000 cubic feet of gas. This well is located in the southwest of the northeast of section 7-14-4. Although the owners say the report is unfounded, scouts of various companies have reported the well as good for the above mentioned amount of gas. The well is now shut down. Roxana Petroleum Company's No. 1 Effie Zollers, third well for the Stroud pool, has been deepened two feet and is now making 1150 barrels of oil from a total depth of 4121 feet. Wolverine also deepened their well in the northeast corner of section 11-14-6 and production was almost doubled. The well is now showing a gauge of 840 barrels per day.

Mid-Kansas Oil and Gas Company's No. 1 Bartlett topped a Dutcher sand at 2556 feet and made about 60 barrels per day from the sand which has been drilled into about 20 feet. The well is located in the northeast of the southeast of section 13-14-10 in Creek County. The well is drilling deeper and will be shot.

The Wetumka field of Northern Hughes County is coming in for a big part of the southern Oklahoma play. Last week the Oklavania-Gladys Belle Oil Company well in the southwest corner of the southeast of section 17-9-9, made 550 barrels from a sand topped at 3018 feet. The Kingwood Oil Company's No. 1 J. Davis at the center of the northwest of the southwest of the southwest of section 3-9-9 made 20 barrels per hour from a sand at 3301 feet and drilled five feet in. This well is an extension to the pool, it being about half a miles northeast of other production. The Papoose Oil Company's No. 1 J. Alexander in the southwest corner of the southeast of section 4-9-9 has found the sand at 3064 feet and has about 5,000,000 cubic feet of gas and 20 barrels of oil. The Oklavania and Gladys Belle Oil Company have spudded their test in the southeast corner of the west half of the northeast of section 17-9-9, half a mile from their No. 1 G. Bruner, the producing well of these interests.

After finding a good gas sand in their well in the southeast corner of the northeast of section 34-9-6, the Turman Oil Company lost a bailer in the hole and now has a fishing job. The sand at 3036 feet seemed to be good for about 7,000,000 cubic feet when open. The well is not far from Seminole City.

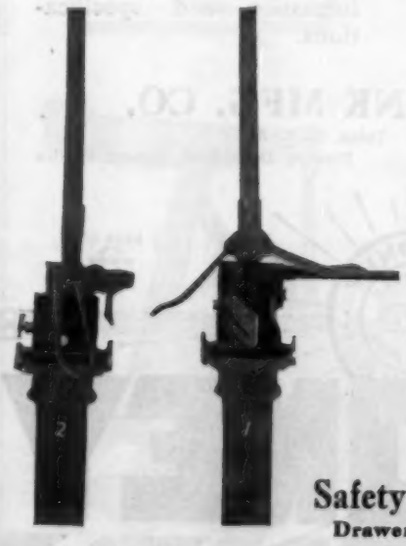
In the Wewoka field the Gypsy Oil Company's No. 1 Foster which extended the pool last week has been deepened and is now making a little less than 1000 barrels per day, an increase

THE WEEK IN OKLAHOMA BY TABULATION

District—	New Rigs	Locations	Dr. Wells	Completions	Producers	Gas Wells	Failures	Initial Prod.
Ardmore	25	8	114	11	10	..	1	1,860
Bristow	30	4	60	4	4	..	..	210
Cushing	23	12	93	4	2	..	2	98
Okmulgee	76	1	91	13	9	1	3	1,640
Osage	37	30	296	16	15	..	1	4,765
Muskogee	12	8	46	3	..	1	2	....
Weleetka	9	11	33	3	3	..	..	255
Tonkawa	8	2	105	3	3	..	..	693
Wewoka	4	5	40	2	2	..	..	1,456
Duncan	4	3	56	16	5	2	9	363
Totals	228	84	934	75	53	4	18	11,340
Last week	233	102	836	42	26	3	13	15,252

New Elevator Support and Release

(Patented)



Stop Lifting Your Tubing to Make Your Kick-off!

Note Drawing No. 1 with elevator on top. The operator applies the brake. Push handle to right.

Note position of tool in Drawing No. 2. String of tubing hanging on pulling machine. Take Elevator off.

Write for complete details

Manufactured by

Safety Pulling Machine Company

Drawer A **Independence, Kansas**

of 15 barrels per hour over the previous production capacity. The well is still drilling in hard formation.

In their No. 5 Jefferson, north of Weleetka, the Gypsy Oil Company has found a gas sand at 2810 feet and after drilling to 2824 feet the capacity is about 15,000,000 cubic feet. The location of the well is shown as being in the center of the west line of the northeast of the southeast of section 13-11-11. Three inch liner is being set in the well. The Oklahoma Oil Company has a nice show of oil and gas in their well in the southeast corner of the northeast of section 34-11-11, north of Weleetka.

C. F. Noble has a small well in his No. 1 Geiger in the northeast corner of the northwest of section 19-15-12, about two miles north of Beggs. Twenty barrels of oil per day is coming from a sand at 1665 feet.

The Thomas B. Slick deep test in the Tonkawa field has a hole full of water at 3100 feet, thus casting a gloom over ideas that the field held a prolific sand on top of the Tonkawa structure. Three other wells drilling for the same deep sand will continue drilling until the deep sand is either proved or pronounced a dry one. The Slick well will continue drilling.

Waite Phillips Company has drilled its test in section 27-17-8 about three feet deeper and it is now making about 50 barrels per hour from a total depth of 2611 feet. This is the well that opened a new Wilcox sand pool last week.

The Oklahoma Eastern Oil Company well known as Tiger No. 7 at the center of the east line of the west half of the southwest of section 24-16-12 is making 50 barrels per hour from a sand at 2230 feet. The well is located in the Wilcox pool, near Mounds.

After deepening their No. 3 Washington in the southwest of the southwest of section 32-17-8, the Olean Petroleum Company's well is making over 1000 barrels per day or an increase of 300 barrels from a total depth of 3524 feet.

Thompson and Black's No. 1 Bruner, in the northwest corner of the southeast of the southeast of section 6-19-12, Bruner pool, near Tulsa, estimated their well for 2000 barrels and upward from a sand topped 2046 feet and drilled in six feet. This is the largest well ever brought in in the Bruner pool.

Every Detail Is *Right*

The Cleaning-Out Plate of the Maloney Tank is taken off and replaced from the outside, and when taken off the opening is flush with the bottom of tank, there being no rim for scraper to catch on.

The tank can be easily and quickly cleaned out and plate replaced without the workman getting inside.

Manholes are gas-tight, joints being offset and packed with gasket in the same way as all other joints of the tank. The lid bolts to the rim and can be taken off and replaced in a few minutes.

No detail has been overlooked to perfect Maloney Tanks. Ask for our catalog C, giving complete information and specifications.

MALONEY TANK MFG. CO.

Offices and Factory: Tulsa, U. S. A.

60 to 3,000 Bbls., Inclusive — Prompt, Dependable Export Service

MADE OF KEYSTONE COPPER STEEL — MALONEY PATENTED BOLTED COPPER-STEEL TANKS — MADE OF KEYSTONE COPPER STEEL

MALONEY TANKS

Completions Soon to Prove Kansas Areas

Wichita, Kans., March 5.—The effect of widespread drilling activity is being felt in Kansas. Wells which were completed back in December have proven themselves and offsets are now nearing completion which will prove that the wildcat tests which were successful were signals for new fields. The Champlin Refining Company well near Peck, brought in back in November is just now being completed. Liner is being run in this well and it will not be long until its true capacity will be determined.

The Hipple and Childs well in Rice County will make about 10 barrels per hour on the pump. Connections are made and the well will now settle down to steady production. Many locations will be made in Rice and adjoining counties in the near future. Four new tests have been announced during the past four days. Operators from Tulsa and many other cities are flocking to this new field in Kansas.

In the Eastman district, which was opened last year by Wilson & Martin, the Phillips Petroleum Company is now drilling at 2500 feet and expected to bring in the next producer for the pool. There are 11 rigs now running in the Eastman district.

The Pulaski Oil Company well in the southwest corner of the northeast of section 8-23-11 is making about 125 barrels of oil per day from a total depth of 1939 feet. The well known as the Holland No. 3 will add its production to the Greenwood pool. The well is a direct offset to the Empire company's No. 9 Clopton.

SINCLAIR LOSES ITALIAN CONCESSION, REPORT

London, Eng., Feb. 18.—Since the oil investigation disclosures in the United States it is reported from Rome that the Italian government has stopped negotiations with Sinclair for drilling concessions in Italy and the project likely will be undertaken by an Italian company headed by Perrone Brothers.

ANGLO PERSIAN ENTERS CANADA

Toronto, Canada, Feb. 22.—Competition for Standard Oil is in sight in the Dominion as it is learned on good authority that the Anglo-Persian Oil Company, British government controlled, is negotiating for oil rights on the vast land holdings of the Hudson Bay Company in western Canada.

Archer County Operations Show Large Increase in Number; Production Up

Wichita Falls, Texas, March 4.—Having registered a steady increase in drilling activity each week since the first of the year, Archer County's drilling report amounted to 181 operations on March 1, as compared with 111 on the first day of the year, while more than 150 completions were made in the county during this two months' period. The heavy drilling campaigns being waged by owners of leases in the proven areas of the county indicate that present pools will be defined and developed in a few more months, and that new territory will have to be added to maintain the volume of drilling activity now taking place.

On March 1 field reports credit the county with a total of 114 tests actively underway, or in process of completion; 19 tests shut down for fuel, water, funds and other causes; 35 rigs and derricks; and 13 locations. Wichita County has also shown a noticeable gain in drilling activity, especially in the lower part of the county, and a survey of field operations taken March 1 shows a total of 103, of which 71 are tests actively underway, or in process of completion; 10 shut down; 15 rigs and derricks; and seven locations.

Several slight extensions were made to Archer County's producing areas last week. Staley & Gwynn's Kemp & Kempner 1, located along south line of section 77 and north of the Ferguson pool, made 250 barrels initial production from regular sand pay at 1758-62 feet. This well is a north offset to production on Dr. Wallace's lease and opens possibilities of this old field being extended further to the north. Gholke and others' L. F. Wilson 1-A, located in section 3, block 25, is reported with several hundred feet of oil in the hole after drilling broken sand pay at 1600 to 1604 feet, and will probably develop a small pumper, thereby giving the old Panther pool a slight extension to the north. A second test drilled by Litchfield-Coleman et al on the W. S. Scruggs lease, located southeast of the Swastika pool and near the Archer-Young County line, is reported showing for a producer from sand at 1362 feet, and a number of new locations have been made. The first well on the Scruggs lease was completed last January, and pumped 55 barrels of oil in 12 hours from sand at 1337 to 1342½ feet.

Archer County established a new high record on pipe line runs during the past week with a daily average of approximately 23,465 barrels. The Texhoma Oil and Refining Company is the largest producer in the county, having maintained a daily average of 3200 barrels last week, while the R. M. F. Oil Company ranks second with 2415 barrels, and the Dale-Griswold Oil Corporation is third with 1690 barrels.

Completion of Hill & Roberts' semi-wildcat test on the W. W. Overby lease on the H. B. Blach survey in lower Wichita County, making 235 barrels in 12 hours swabbing, is leading up to additional wildcat activity in this general section of the county. This well encountered the sand pay at 1497 feet and drilled to 1501 feet. About one mile due south, L. P. Hammond's test on the B. N. Ferguson lease, G. P. Meade survey, is setting casing to test sand at 1805-06 feet. A showing of gas at 560 feet to 570 feet is reported from the wildcat test being drilled by Maer-Staniforth & Willis on the J. A. Kemp lease, section 8, Kemp subdivision, and north of Lake Wichita. This gas pay was passed up and drilling is now in progress below 1200 feet.

Flowing by heads at the rate of about 50 barrels of oil and 1,000,000 cubic feet of gas daily, the wildcat test of Whitehead and others on the A. M. Graham lease has developed production almost in the town of Graham, Young County. This test is east of the court house and west of the small producer completed some months ago from the deep pay on the C. W. Johnson lease. The Graham producer is reported to have drilled only two feet into the pay to 4263 feet. In the East Bunger district, Sinclair Oil and Gas Company's L. P. Moran 3, which failed to make a producer from the regular Moran pay sand, is making 3,000,000 cubic feet of dry gas and fishing tools at 4100 feet.

Archer County

Drilling Report

North Half

Amer. Ref. Co.'s K. & K. 6-B, dr 1365 ft. Andrade & Douglas' L. F. Wilson 1, dk.

Bain et al's Block 1, spdg. Burns & Maxson's Mrs. J. E. Parrish 2, dr 1240 ft. Bridwell & Heydrick's Wilson 4, dr 580 ft. Barnes & Bishop's Wilson 2, dk. Beaudoin et al's Thompson 1, dr 1415 ft. Brannon & McGregor's Wilson 2, 1614 ft. Boller-Wolf & Minchew's Wilmot 4, testing sand 1584 ft. Boller-Shaw et al's Wilson 6, dr 1215 ft; Wilson 7, dr 1540 ft; Wilson 8, dr 540 ft; Wilson 9, dr 1200 ft; Wilson 10, spdg; Wilson 11, dr 800 ft; Wilson 12, dr 610 ft; Wilson 13, dr 540 ft; Wilson 14, lcn. Burton & Ruff's W. F. Parrish 3, dr 1610 ft.

Camp Oil & Gas Co. et al's Wilson 7-H, dr 1585 ft; Wilson 8-H, lcn; Wilson 9-H, testing sand 1594 ft. Carter & Balyeat's Mrs. J. E. Parrish 1, dk. N. B. Chenault et al's Jackson 1, dr 1795 ft. Comet Pet. Co.'s Ferguson 20, dr 1485 ft. County Line Oil Co.'s Hugh Reilly 1, rigging up.

Dale Oil Corp.'s Wilmot 8, dr 1580 ft; Wilson 7, dr 1305 ft. Dillday et al's Ferguson 1, sd 2615 ft. Dorian et al's Wilson 5, dr 1080 ft. Frank Darr's Ferguson 1, sidetracking junk 1605 ft.

Empire Gas & Fuel Co.'s Wilson 4-B, prep. to pump 1597 ft; Wilson 5-B, testing sand 1591 ft; Wilson 6-B, prep. to pump 1598 ft; Wilson 7-B, dr 1145 ft; Wilson 8-B, rig; Wilson 2-C, dr 1400 ft; Wilson 3-C, dr 1345 ft; Wilson 4-C, dr 900 ft; Wilson 5-C, lcn; Wilson 6-C, rigging up. Erwin & Murphy's T. B. Wilson 1, taking second core 1633 ft. Evangeline Oil Co.'s O. F. Haley 1, dk. Everts & Co.'s J. B. Miller 1, dr 600 ft.

Fenton et al's Wilson 1, showing oil, dr 1605 ft. F. & H. Synd.'s Ferguson 15-A, dr 1400 ft. P. F. Gwynn et al's Carter 8, dr 810 ft; Wilson (blk 16) 1, dk; Wilson (blk 6) 4, dr 1440 ft; Wilson 5, dr 900 ft; Wilson 6, dk. Gohlke et al's Wilson 1-A, showing oil, dr 1605 ft. Graham et al's Wilson 1-B, dr 490 ft.

Hawkins & Hester's Mrs. J. H. Carter 3, lcn; Carter Bros. 3, bailing oil and water 1377 ft. Hackman & Sanderson's McCall et al 4, sd 660 ft.

Iatan Oil Co.'s Kemp & Kell 1, coring sand 1630 ft; Wilson 1, rig.

Jetter et al's J. H. White 1, ratholing 1525 ft.

King, Lewis & Hampton's Ground 1, dr 1580 ft. Kimmel & Dillard's K. & K. 6, dr 700 ft. Kentucky Oil Corp. et al's Wilson 1-A, dk; Wilson 4-B, dk; Wilson 2-D, dr 1420 ft; Wilson 3-D, spdg; Wilson 2-E, dr 1500 ft; Wilson 7-E, dr 1385 ft; Wilson 8-E, dk; Wilson 10-E, spdg; Wilson 11-E, spdg; Wilson 1-F, sd 1595 ft; Wilson 2-F, spdg. Kimbrough & Miller's Perkins et al 1, sd 340 ft.

Lanning & Moninger et al's W. F. Parrish 2, dr 1440 ft; Parrish 3, dr 1100 ft; Parrish 4, dr 900 ft. W. S. Langford et al's K. & K. 6, dr 1245 ft. J. G. Lane et al's Wilson 1, lcn.

Maer-Standiforth & Gwynn's Wilson 3, dr 620 ft. Maer & Standiforth's Wilson 4, preparing to pump 1402 ft; Wilson 5, dr 1330 ft; Wilson 6, dr 800 ft; Wilson 7, dr 900 ft; Wilson 8, rig. Murchison & Fain's A. P.

TRADE MARK
KEYSTONE
REGISTERED U. S. PATENT OFFICE

Improved Deep Well Rig

EMBODIES THESE VALUABLE FEATURES

Friction Tool Hoist—Casing Reel—Indestructible Steel Sills—Keystone Patented Spudding Device—V-Friction Brakes, Patented—Babbitted Bearings throughout.

This machine is new—modern, complete, the product of an old and established concern. It is backed by 35 years of experience in the manufacture of portable drilling rigs and a world-wide reputation.

We are building three sizes: No. 27, for 2500 feet; No. 32, for 3000 feet; and No. 35, for 3500 feet depth.

Machines can be seen in various parts of the Kansas, Oklahoma and Pennsylvania fields. Let us wire you where to find one. BULLETIN 302 and prices on request.

KEYSTONE DRILLER CO.
BEAVER FALLS, PA.
Branch Office and Plant
Joplin, Mo.

Jackson 1, dr 420 ft; Wilson (blk 8) 1, dr 1080 ft; Wilson 2, dk. McCarty Oil Co.'s Wilson 14, dr 1420 ft. Moore et al's Wilson 2, dk.

George L. Pace et al's J. H. White 1, sd 800 ft. Petroleum Prod. Co.'s McCall et al 1, sd 1945 ft. T. J. Pyle et al's J. H. White 2, spdg. Panhandle & Duke Oil Co.'s W. F. Parrish 2, dr 1470 ft; Parrish 3, dr 615 ft.

Raznor et al's Netherton 1, dr 1795 ft. R. M. Oil Co.'s Wilson 3-D, dr 1380 ft; Wilson 13-D, dr 550 ft; Wilson 17-D, rig; Wilson 21-D, dr 575 ft; Wilson 29-D, dr 1510 ft. Riner & Bailey's Wilson 3-B, rig.

Scott & Gose et al's Mrs. J. E. Parrish 4, dr 1280 ft. Staley & Wynn's K. & K. 2-F, lcn; Wilson 1-C, dr 1580 ft. C. E. Steward et al's Helm 1, dk. Sunshine State Oil & Ref. Co. et al's Carter Bros. 5, testing sand 1613 ft; Carter Bros. 6, sd 1500 ft. J. S. Stone & Baldwin's Wilson 1, dk. S. Sebersky et al's J. H. White 2, dk. T. O. Shappell Oil Co.'s J. L. Jackson 6, dr 1595 ft; Jackson 7, lcn. Bruce Sullivan's Parrish Bros. 1, sd 300 ft. A. T. Sibley et al's Wilmot 8, prep. to pump 1601 ft. Sixty-Six Oil Co.'s Wilson 1-C, spdg; Wilson 1-D, lcn.

Texhoma Oil & Ref. Co.'s K. & K. (blk 63) 1, dr 1100 ft; Parrish Bros. 1, dr 510 ft. Sterrett 1, dr 1400 ft; Wilson 3-B, dr 1310 ft; Wilson 4-B, dr 1100 ft; Wilson 5-B, 6-B and 7-B, lcns. The Texas Co.'s W. F. Parrish 3-A, dr 1240 ft; Parrish 8, dr 1540 ft; Parrish 9, dr 1180 ft; Parrish 10 and 11, rig. Texhoma-Burton & Ruff's Wilson 1, dr 1605 ft.

Underwood Drilling Co.'s Wilson 2-A, dk; Wilson 1-B, dr 1080 ft; Wilson 2-B, dr 575 ft.

C. H. Verschoyle et al's Wilson 2-B, prep. to pump 1387 ft; Wilson 3-B, dr 540 ft; Wilson 4-B, rig. Moss 1, re-bldg burned dk, td 925 ft.

Dr. C. W. Wallace et al's K. & K. 24, setting cas 1750 ft. Wilson Drilling Co.'s K. & K. 7, sd for shot 1440 ft. W. T. Willis et al's Jackson 2, dr 605 ft. G. C. Wood et al's Wilson 2, dr 1425 ft; Wilson 3, dk.

IMMEDIATE SHIPMENT

We have in stock FABRICATED TANKS up to 10,000 barrels for Immediate Shipment.

We can Fabricate tanks for Quick Delivery up to 25,000 barrels from our stock of Plates at DALLAS.

NO LONG DELAYS IN TRANSIT.

Our facilities for erection in this territory are excellent and where quick service is imperative our service will satisfy you.

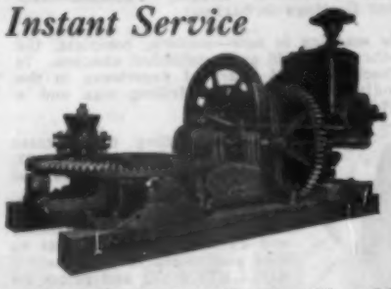
We can supply any type of roof, including Gas Tight or Water Seal.

Send us your inquiries for High Class Tanks, Fabricated or Erected.

WYATT METAL & BOILER WORKS

OFFICE & PLANT WEST DALLAS

Instant Service



More Power—Less Vibration

They Are Correct in Design

Husky Enough to Do the Job Right

The reliable eccentric motion does away with jerky lines.

Built in three sizes:

No. 4—Belt Drive, weight 6500 lbs. For deep wells.

No. 2—12 H. P. engine, weight 4600 lbs.

No. 1—6 or 8 H. P. engine, weight 3200 lbs.

Turntable gear is easily removable and having a broad face, coarse teeth and large diameter will stand up to the heaviest loads.

SHACKLE LINES SET LOW TO THE GROUND (13 in.) ELIMINATE EXCESSIVE STRAIN. QUICKLY INSTALLED.

Oil Field Supply Dept.

KANSAS CITY HAY PRESS COMPANY

Kansas City, Mo.

South Half

American Ref. Co.'s Ward 1, sd for repairs with showing oil, td 951 ft. Armstrong et al's Martin 1, dk.

Brown et al's Mrs. Cowan 1, dk.

Cavin et al's Bishop 1, dr 1300 ft. Comac Oil Co.'s L. H. Farmer 1, dr 860 ft. Clark & McGee's W. S. Scruggs 1, prep. to pump sand 1234-39 ft; Scruggs 2, spdg. Chambers & Dobbs' Andrews 1, sd 960 ft. Chancellor & Sparks' Zotz 1, sd 1025 ft.

Danciger et al's R. D. Maxwell 1, dr 1575 ft.

Empire Gas & Fuel Co.'s J. R. Parkey 1, sd 1545 ft.

Green & Flowers' Abercrombie & Taylor 1, dr 1050 ft. Golding et al's G. A. Lauster 1, dr 1425 ft.

Herbert Oil Co.'s J. L. Anderson 1, showing oil, lost casing seat 1436 ft. Hobbs- Burleson & Chenault's W. Goldsmith 4, dk. Holmes et al's W. H. Thomas 1, dr 520 ft. Hudspeth & Rubsam's Abercrombie-Taylor 2, sd 1105 ft.

Knight-Hines & Barker's J. Seay 1, dr 1630 ft. Knight & Hines Abercrombie et al 1, lcn.

Litchfield-Coleman et al's W. S. Scruggs 2, bailing sand 1362 ft. Logan & Mitchem's J. P. Knezek 1, dr 700 ft.

Mascho & Barnhart's Winter 1, sd 1650 ft. Murchison & Fain's Coody 1, lcn; John Graves 1, dk. McKenzie & Logan's 1, dk. McCracken et al's Sadau 1, dr 200 ft.

Nebraska-Texas Oil Co.'s Holosek 1, sd 205 ft. Norton & King's O'Donnell 1, plugging to abn 1288 ft.

Richardson & Gatewood's Wilson Heirs 1, lcn. A. T. Strong et al's J. B. Hull 1, spdg. Shamrock Oil Co.'s J. T. Richardson 3-B, dr 1065 ft; Richardson 1-C, dr 300 ft; W. Harbison 4, dr 800 ft. Swastika Oil Synd.'s Goldsmith 2, fsh 1170 ft. Sun Oil Co.'s Kovar 2, rig. Suggett et al's Bloodworth 1, dk.

The Texas Co.'s J. H. Turbeville 1, testing sand 1585-87 ft; Nored 1, rig. Taylor et al's Ward 1, dk.

Wall Duke Oil Co.'s Garvey 1, dr 1560 ft.

Luling Extension Gives Promise of Good Field

Luling, Texas, March 8.—Oil men continue to flock to Guadalupe County and the new oil town of Allenton (formerly Gander Slue) is growing. Most of the new arrivals make their headquarters in Luling, Seguin and Kingsbury but Allenton bids fair to become a typical oil settlement in the midst of a field. The McKean No. 1 of the United North and South appears to have convinced operators that there is as much or possibly more production in Guadalupe County than in the Luling discovery field across the river. Acreage has been blocked for many miles in all directions and a series of derricks extends clear across the county to Bexar County line, some ten miles.

Over near Lavernia, which is in Bexar County and only about 30 miles from San Antonio, oil has been found in a series of tests extending over the last five years in a country similar to the Somerset territory of Atascosa County. Nobody however, has been able to make a commercial well but the oil bearing formations—a sort of sandy shale—extend over a wide area and the opinion seems to be that this oil is migratory and is coming from a considerable pool.

There were no important completions during the week in the Luling pool but a number of wells are ready to drill in. Report that the McCorkle pipe line contemplates an extension into the Luling pool was favorably commented upon by operators as affording another market for this crude which for the first year, was greatly handicapped for want of pipeline and storage facilities.

Large Producers Encourage Drilling To Deeper Sand Pay in Powell Field

Corsicana, Texas, March 4.—Completion of three unusually large oil producers from the Woodbine sand pay on the Hill tank farm on the southwest edge of the Corsicana-Powell field in the past two weeks, as result of drilling deeper into the sand than has been the case heretofore in this particular area, has resulted in a number of nearby lease owners deciding to try deepening their pumping wells. Hoosier and associates' Hill tank farm 1, which was completed last January making 350 barrels initial production on the pump from sand pay at 2960 to 2968 feet, was deepened to 2980 feet last last week, resulting in a flow of 13,000 barrels of oil. This well was deepened after Stroube & Stroube's Hill tank farm well blew in making more than 8000 barrels initial flow and later increased its production. The latter well was reported flowing about 11,600 barrels daily early this week, while the Hoosier well was credited with a flow of 12,500 barrels. The third big well was brought in by Humble Oil and Refining Company on the same farm making 7000 barrels daily after being deepened to 2970 feet. The Hill tank farm is partially covered with steel tanks owned by Humble, and is furnishing the largest wells the field has experienced in several months.

These big wells are believed to be close to the fault line to the west of the field, and formations logged while drilling were somewhat irregular when compared with nearby wells. The drillers have not been drilling through the sand pay, owing to the water hazard that underlies the sand in a greater part of the field, and for this reason the big pay was not disturbed on the Hill tank farm until the Stroube & Stroube well took more sand than usual and blew in as a large producer.

CORSICANA PRODUCTION

Corsicana, Texas, March 5.—The daily average production for the field for the past week was divided as follows:

	Barrels
Humble Oil and Refining Company	28,900
Gulf Production Company	13,800
Sturbe & Sturbe	12,500
Humphreys Oil Company	9,500
Tidal Oil Company	9,300
Simms Oil Company	7,050
Atlantic Oil Prod. Company	4,300
Roxana Petroleum Company	3,550
McMann Oil Company	3,450
Garland Kent et al	3,000
The Texas Company	2,450
Texas Magnolia	2,425
Witherspoon Oil Company	1,700
J. K. Hughes Devolpment Company	1,400
Kirby Petroleum Company	1,350
Skelly Oil Company	1,200
Mutual Oil Company	1,100
T. & B. V. R. R. Co	1,000
Galloway, Bass et al	850
Sun Company	725
Elliot et al	650
U. S. Texas Oil Corporation	450
Watts, Farrish & Collins	425
Barclay and Meadows	300
Mitchell & Jones	250
Cosden Oil and Gas Company	200
New Domain Oil Company	150
T. F. Hunter et al	100
Miscellaneous	550
Total	112,625
Last week	103,400

800 Barrel Flowing Well at Breckenridge

Fort Worth, Texas, March 4.—Completion of an 800 barrel flowing well on the J. L. Keel lease in the northeast Breckenridge section of Stephens County by the Pender Production Company last week, has resulted in five new locations being made. The big well encountered the top of the lime pay at 3248 feet and drilled to 3283 feet, and is reported to be making about 200 barrels of water in addition to the oil, as is the history of other producers to the east and southeast. Two new locations have been made by the Pender Production Company in a line to the west of the new completion, while the Sun Oil Company has started an offset to the south of the producer on the H. Stoker lease, and will offset the two new locations made by the Pender Company. About two miles south of this area, Scott & Bateman's J. Davis 2 is reported swabbing and flowing about 100 barrels of oil and some water from lime pay at 3253 feet.

Another gas producer was added to deep field in the southwest corner of Palo Pinto County near Mingus last week when Moore & Sneboldt's Pruitt 1 began flowing 2,000,000 cubic feet of gas from top of sand at 3295 feet. A ready market is available for all gas produced in this section through the Lone Star Gas Company, which has gathering lines serving the gas area.

Gulf Coast Completions Decrease for Past Week

Houston, Texas, March 7.—Completions for the Gulf Coast district show a decrease for the week just ended, with a total of 10 completions against 16 last week. This week half of all the wells completed in the entire Gulf Coast were reported from Hull.

Activity has been heavier in the Hull district since the first of the year than in any other coastal field. A check shows that 26 wells have been completed at Hull since January 1. Of this number, two were above the 10,000 barrel size. For the week ending February 2, the Republic Production Company reported its Dolbear 76 as making between 11,000 and 12,000 barrels. The Humble Company brought in a 15,000 barrel well in its Sterling 1 during the week ending March 1. Production in the Humble well is coming from below 4100 feet. The Dolbear well hit the pay sand at approximately 2800 feet. Judging from the result of the Humble well, it looks as if the better pay sands at Hull are to be found by deep drilling.

Much the same situation exists at Orange. Since the first of the year 18 wells have been completed in that field. Of this number seven wells have been drilled to below 4000 feet. The deepest well, the Humble Oil and Refining Company's Winfree 8, a workover, made a dry hole at 4910 feet. A short time ago a check showed 10 wells in the Orange field drilling below 4200 feet. Good producers have been brought in there from a depth of more than 4500 feet, and several wells are drilling now below the 4000 foot level.

The bulk of activity in the Gulf Coast is centered at Orange and Hull at this time. Other fields are comparatively quiet and few completions are reported. Wildcatting is being done in several coastal counties and with the rising price of oil, other tests will probably be undertaken before long. Permits to drill are increasing each week, but a majority of these are for the northern and Western Texas fields.

Production figures for Gulf Coast fields are maintaining a more or less steady level at approximately 81,000 barrels at the present time. This is a decrease of approximately 16,000 barrels as compared with the same time last year and a decrease of more than 23,000 barrels as compared with March, 1922.

Operations Resumed In Stephens Field

El Dorado, Ark., March 3.—Notable among this week's reports from the Arkansas fields is mention of the fact that Sam Richardson and Company have obtained a production of 3500 barrels of oil per day, estimated, after having installed an air-jammer on their No. 1 E. G. Murphy, in section 23-16-15, Union County, Smackover field.

The Standard, Gulf and Arkansas-Invincible are each resuming drilling operations in the Stephens field, which has been devoid of activity for several weeks.

Smitherman and McDonald have drilled the six-inch plug at 1168 feet in their No. A-1 Womack, in section 10-14-21, of the Irma field, in Nevada County. Dee et al are shut down for orders at 1335 feet in their No. 1 Johnson in section 27-14-21, in which the Nacatoch sand has not yet been found.

The Texas Company has tested salt water from four feet of sand at a total depth of 2383 feet in its wildcat on the property of the Chicago Land and Timber Company, in section 14-6-13, near Sheridan in Grant County.

The Vitex Oil and Refining Company has set six-inch at 2575 feet, preparatory to making a test at around 2645 feet, in its No. 1 Adams, a wildcat located in section 29-12-12, near Tinsman, in Calhoun County.

The Columbia Hope Oil Company has set 5 3/16-inch casing and perforated it at the bottom for the purpose of making a test at around 2145 feet in its No. 2 King, in section 24-11-25, near Washington, in Hempstead County. Dudney et al are shut down at 2000 feet in their No. 1 Spates, in section 19-12-27, near Red Bluff.

The Kan-Ark Petroleum Company is drilling the eight-inch plug at 1164 feet in its White test in section 11-13-21, near Rosston, in Nevada County. The Miller-Burnham-Hawley Syndicate is drilling at 1070 feet in its No. 1 Perry, in section 12-15-22, near Delta.

Foster et al are drilling at 1670 feet in their Harvey wildcat in section 32-11-19, near Sayre, in Ouachita County.

Santa Fe, N. M., March 1.—Drilling rights on acreage of the New Mexico and Arizona Land Company are being negotiated by The Texas Company.

Completion of Two Additional Tests as Gassers Leaves Cotton Valley in Doubt

Shreveport, La., March 3.—While assembling material for the Louisiana section of last week's issue, it seemed to the writer that the story of Cotton Valley must soon be told; but now, after another week has passed and two more important tests have been brought in as gassers, the solution of the puzzle seems more deeply clouded in mystery than ever before. For instance, the single commercial oil well in the field is directly offset by a deeper well which yields dry gas, and the deepest hole on the structure, corrected to sea level, yields only gas. However, both of these wells were shut in within a very few minutes after they were completed, and there is thought to be some likelihood that continued blowing may develop oil production in one or both of them.

The Ohio Oil Company's direct offset to the Louisiana's producer, purchased recently from the Cotton Valley (Snyder) Syndicate, was brought in last Saturday morning with an initial production of dry gas estimated at 15 million cubic feet daily from seven feet of sand logged at a total depth of 2538 feet. According to the best data available, this hole is ten or twelve feet deeper than the offsetting oil well, but the possibility of error in elevations or log measurements might explain this apparent conflict.

The Merritt discovery gasser, brought in by Dr. Webb and associates at a depth of 2558 feet and later sold to the Humble Oil and Refining Company, was bailed in again yesterday after having been deepened to 2582 feet. The writer's best sources of information indicate that it made at the rate of 35 million cubic feet of gas per day while open. Other reports credit the well with a spray of oil, although these might be traceable to confusion arising from the fact that a great deal of brown sand, probably resembling a spray of oil, was blown out, This well appears to have been measured carefully, and it has added one additional item to the few things that are definitely known about the Cotton Valley structure, namely, that a thin stratum of shale, from which a core was obtained, separates the higher sand, in which the gas was discovered, from a lower sand which might later be proven to be the source of the oil produced by the Louisiana's well.

None of the wells that are well located structurally has as yet shown any salt water whatever. However, the Fortuna Oil Company's Stratton well, in section 31-22-10, about five miles to the northwest, has tested salt water from 20 feet of sand at a total depth of 2754 feet.

Probably the most important test of the near future is to be made in the Fortuna Company's Pruitt well, in section 17-21-9, now drilling at 2470 feet. This well is located about two miles east of the Oil Fields Gas Company's Hope well, which topped the sand at a higher level than any other well yet completed on the structure. This Pruitt well may yield important information in regard to the eastern slope of the structure. The earliest test of the immediate future is to be made about Thursday of this week in the Ohio Oil Company's Hodges well No. 2, in the southeast corner of the southeast quarter of the northeast quarter of section 15-21-10, offsetting the Fortuna's Merritt completion in section 14-21-10.

A great many local operators and scouts expect to return to Cotton Valley tomorrow, as it is reported that the Ohio's Merritt well, as perhaps also the Humble's Merritt well and the Fortuna's Merritt well, may be opened for further testing.

Shreveport, La., March 4.—The Ohio Oil Company's Merritt well, offsetting the Louisiana's producer at Cotton Valley, was opened wide for an hour and a half today and made at the rate of 15,000,000 cubic feet of gas per day estimated. Well shows 975 pounds pressure when shut in. It has been reopened through a one and one-half inch choke and registers 725 pounds pressure. It is making a very light spray of oil. It is said that the well will be permitted to blow through the choke for a few days. Fortuna Oil Company is digging pit and constructing flow box preparatory to opening up its Merritt well in section 14-21-10, which was completed last October as a gasser with a slight spray of oil. Fortuna is preparing to drill deeper in its Stratton well in section 31-22-10, which tested salt water last week at 2759 feet. Ray O'Brien's Dales wildcat in section 26-21-9, between Cotton Valley and Homer has been abandoned at 3012 feet in salt water.

Sarepta

Bolinger et al bailed salt water with a showing of oil from twelve feet of sandy shale and lime at a total depth of 2722 feet in their well in section 3-22-12, Bossier Parish, about six miles southwest of the Lloyd Harris well, in the direction of Plain Dealing. Two new locations have been made on the property of the Bodcau Lumber Company in this vicinity, the Atlantic Oil Producing Company having built a derrick in the northwest quarter of the southwest quarter of section 24, and Bolinger et al having driven a stake at a point 330 feet north and east of the southwest corner of the northwest quarter of section 15, both in township 23-12.

Oakland

Observers seem agreed that the Union Parish area is approaching its zero hour, and that, if no oil is found in the impending test of the Gulf Refining Company in its Security Trust well, in section 23-23-1w, the excitement at Oakland may fade into history. The Gulf's Green well, in the northeast corner of section 19-23-1e, has been bailed dry at 2245 feet, and it showed salt water when tested again at 2245 feet and 2249 feet. Tarver et al have tested salt water from 17 feet of sand at 2425 feet in their No. 1 Rhodes, in section 30-21-1w, and the Roxana Petroleum Company is preparing to plug and abandon its No. 1 Smith, which is also a failure at a total depth of 2294 feet. Lide and Mitchell have shut down at 950 feet in their Templeton well, in section 18-23-1e, probably to await developments. Davidson and Palmer have shut down at 77 feet, probably for the same reason, after having made just enough hole to hold their lease on the Frost-Johnson tract in section 17-23-1e, as also have Feazel et al on the Green property in section 19-23-1e.

Evans et al are drilling at 2416 feet in their Cole test, in section 16-22-2e. The Ohio Oil Company is drilling at 2575 feet in its well on the property of the Dubach Lumber Company, in section 15-20-1w.

Wildcats

The Block Oil and Gas Company has resumed drilling, and is now down below 1360 feet in its Aubrey test, in section 20-21-8, of Claiborne Parish, west of the Homer field. This well was formerly abandoned at 1100 feet. Collins and Woodley have made a location on the Reynolds land, in the center of the northeast quarter of the northwest quarter of section 30-21-4, near Lisbon. The El Dorado Chief Oil and Gas Company, which has drilled several tests in township 22-7, about four miles north of the town of Homer, has begun drilling and is down below 600 feet in another well, located on the Gandy tract in section 36 of that township.

The Arkansas Fuel Company is drilling below 2050 feet in its No. 1 Harrell, in section 6-18-5, near Arcadia, in Bienville Parish.

The Alabama Petroleum Company is drilling below 3740 feet in its Barlow deep test, in section 5-21-15, near Lewis, in Caddo Parish. Brewer and Sewell are drilling at 2715 feet in their Sharp wildcat in section 15-18-16, near Blanchard and the western end of Cross Lake. The Louisiana Petroleum Company is drilling below 2925 feet, after having tested dry at 2903 feet, in its No. 1 Brewer, in section 33-23-15, between Rodessa and Vivian. The Crude Oil Company of Delaware is drilling below 3105 feet in its test on the Alexander-Ledbetter fee, in section 27-16-14, about ten miles north of Gilliam.

The Urania Petroleum Company has set six-inch casing at 1563 feet in its No. 3 Urania, in section 20-10-2e, near Urania, in La Salle Parish. Helm and Burch are drilling below 535 feet in their No. 1 Urania, in section 21-11-2e.

Senator Ulrey is drilling below 2500 feet in his wildcat on the Frost-Johnson Lumber Company's property in section 3-11-15, near Logansport, in De Soto Parish.

The Four Creeks Oil Company is shut down at 2200 feet in its No. 1 Colvin, in section 35-20-3w, near Dubach, in Lincoln Parish. The Middlefork Syndicate is shut down after having obtained a flow of salt water from a depth of 2625 feet in its No. 1 Kay, in section 8-20-3w.

The Haynes Oil and Gas Company has set six-inch casing at 2568 feet in its wildcat on the property of the Dixie Lumber Company, in section 17-17-3e, about five miles northwest of the town of Monroe.

Stack and Egger have encountered a flow of fresh water at 100 feet in their newly begun wildcat on W. E. Bible's land, in section 8-20-9, near Hortman, several miles southeast of Cotton Valley, in Webster Parish.

Ontario Deep Producer Shows Up as Small Producer When Placed on Pump

Calgary, Alta., March 3.—The much discussed Trenton producer drilled last fall by the Glenwood Natural Gas Company on the Hugh Shanks farm, Romney township, Kent County, in the Ontario fields, is at last on the pump, and in its initial showing is somewhat disappointing. With the tubing set down 1500 feet the well is pumping around 20 barrels a day. Tests will be made with the tubing down 2000 feet and at a number of other points. The production comes from thhe bottom of the Trenton, and till the tubing was put in the wells was flowing by heads once a week, starting about 200 barrels but latterly declining to about 55 barrels.

Two deep tests now drilling are nearing the final stages of completion. In Romney township, east of Port Alma, Union Natural Gas Company's No. 248, Truckenbrod farm, has set casing on the Trenton and is drilling 100 feet or more in that formation. Union Natural Gas Company's No. 249, Mancell farm, Tilbury East, started some months later than No. 248, has practically overtaken it, and is also drilling in the top of the Trenton limestone, with casing set. Another three or four weeks of drilling may see both these wells completed, and determine the possible extension of the Romney deep production.

Eugene Coste and Company's No. 6 is down 500 feet with a deep test on the Malott farm, Tilbury East township. This is the furthest north test drilling in this area, and is trying out a supposed connection between the Romney production and the Trenton limestone production in Dover township, on Lake St. Clair. To the west, in Essex County, the Southern Ontario Gas Company has material on the ground for a deep test between Arner and Harrow. In Lambton County the High Pressure Oil and Gas Company's No. 2 at Arkona is pretty well into the Trenton and should finish in a couple of weeks.

Severe winter weather has interfered with drilling for gas. In Essex B. Jasperson No. 4 at Kingsville is reported shut down just above the gas sand. In Elgin County, the Dominion Natural Gas Company's No. 6 Lakeview is shut down. In Norfolk County the Dominion Natural Gas Company test near Simcoe is rigged up, but waiting for better weather to start drilling.

Oklahoma and Texas interests represented by J. R. Albert are planning to put four rigs on acreage recently secured in Kent County, to test the Trenton limestone in a portion of the county where no deep drilling has yet been undertaken. The exact location has not been disclosed, but it is generally understood to be near Wallaceburg, in the northwestern part of the county, some distance north of the Dover production.

The outstanding feature of developments in the Canadian West is the reported extension of the Sarnia Oil and Gas Company's plans for operating in the Many Island Lake field, northeast of Medicine Hat. This company, organized originally at Sarnia, Ont., to drill for gas in Sarnia township, has been investigating carbon black production, and is reported to have secured the backing of British capital to the extent of £1,000,000 for various undertakings in the Central West. The company has contracts with the Medicine Hat Development Company of Medicine Hat and the Canadian-American Oil and Gas Company, backed by Idaho capital, to handle the gas production of their leases in the Many Island Lake field. The plans include construction of a carbon black plant, machinery for which, including 6 burning houses, has already been ordered; construction of a gasoline extraction plant, and possibly the construction of a plant to extract helium from the dry gas produced in this area. Wells drilled by the Medicine Hat Development Company and the Community Oils, Ltd., on leases of the first named company have encountered both dry and wet gas, the former between 900 and 1100 feet, and the latter below 1350 feet. The Canadian American Oil and Gas Company has some gas production in one unfinished test; Many Island Oil and Gas Company is down 1480 feet and has some gas in its Drazan No. 1, and a couple of other tests are down a few hundred feet. All this drilling is shut down for the winter, but work will resume in the spring, and it is expected the development work will be extended and the field developed on a systematic basis for further gas production.

In the Irma-Wainwright field the Baxter Lake Oil Company has arranged for further development of its holdings, this time by British interests. British Petroleums, Ltd., will probably locate its first tests of the season fairly close to No. 2 producer on section 30-46-6w4, evidently planning to test out the possible extension of the producing area. This work will be supplemented by two tests drilled on leases of the Irma Oil Holdings, Ltd., fairly close to British Petroleums No. 1. The coming season should see the immediate vicinity of the discovery well pretty thoroughly tested.

Amerada to Seek Oil in Nebraska

Omaha, Neb., March 3.—Preparations are being made by the Amerada Petroleum Corporation of New York and Tulsa, Oklahoma, to test out the eastern section of Nebraska for an oil showing.

The Amerada is assembling material to start a diamond core drill test in Cass County and a Sullivan diamond drill is to be used.

The location of the test is in the southeast quarter of section 26-11n-12 east, Cass County, and is about 25 miles south of Omaha and some 30 miles east of Lincoln.

The Amerada recently sent a representative of the company from the Tulsa offices to visit Nebraska and make a survey of the state's oil possibilities with respect to general surface structure.

Muskogee, Okla., March 3.—Application has been made here for the appointment of a federal receiver for the Sapulpa Refining Company, an Oklahoma producing and refining corporation now in the hands of state court receivers.

Independence, Kans., March 4.—Negotiations are being carried on by Chas. E. Roth, well known Mid-Continent oil man of Independence, looking to the leasing of some 5,000,000 acres of land in the Arctic region, located southwest of the Merschel Island. The land is believed to have good oil possibilities.

Snow and Rain Check Work in Eastern Fields; Small Flush Production Added

Pittsburgh, Pa., March 4.—But little accomplished in the fields east of the Mississippi river during the week in review on account of changeable weather. High waters prevail over the oil producing areas of the East, as a result of the heavy snows melting. Roads are in such shape that material can not be handled over them.

Slight changes in development work will probably continue until along early in April and then if the industry is in a thriving condition, operations will start on a very active scale. Probably the bad weather will prove valuable since active work has not yet started; and just at this time refiners are disposing of less of their products than at any time during the winter months. Most refiners are claiming that there is practically no business while a few weeks ago they were scrambling for crude.

New flush production of the 89 wells completed for the week amounted to but 314 barrels, the lightest flush production reported for several years from the fields of the east. The finding of small producers does not discourage operators, but conditions are the main topic of the trade. West Virginia did nicely in the number of completions reported for the week with a total of 35 wells completed. Of this number 9 were dry holes, 11 were gas wells, with a volume of 29,500,000 cubic feet, and 20 were oil wells, with a production of but 88 barrels. Kentucky shows a heavy falling off in completed work, with but 12 new wells. Four of these were producers, with a production of but 140 barrels flush. All these wells were drilled in the Western Kentucky division. The next several days will show new completions in the Eastern Kentucky regions, in the Weir sand also in Cumberland County, which should boost the average of the state to some extent.

The 89 wells, the total completions for the week, showed 23 dry holes, 27 gas wells, with a volume of 61,250,000 cubic feet and 39 oil wells, with a flush of 314 barrels.

Pipe line systems over the various fields have experienced hard work in running oil on account of the heavy snow, sleet and rain.

There're 7 reasons why I tie to a "TEX" plunger WORKING BARREL

Patented

1.—Will pump floating sand
2.—Has no cups
3.—Will not cut oil
4.—Packs itself
5.—Cuts operating expense
6.—Increases production
7.—Eliminates frequent rod pulling

AND FURTHERMOST

Because the inventor of this barrel is a practical production man whose knowledge of the needs of the producers was gained through many years experience with large companies. It is the practical working barrel for the practical man. It not only does all that is claimed above,—but, it saves time, which means money. *Send for illustrated folder.*

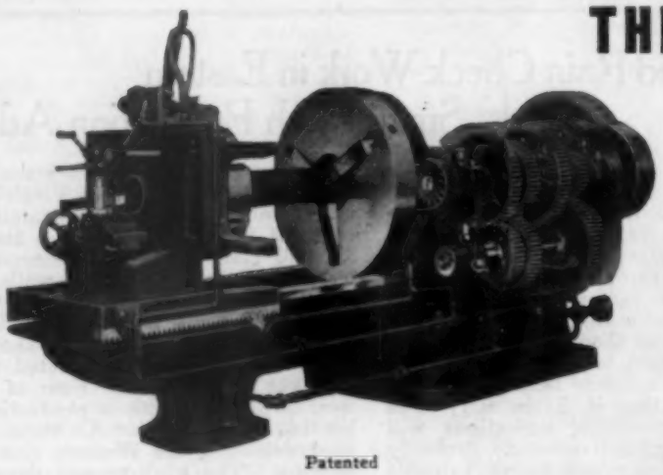
BRADFORD MOTOR WORKS

BRADFORD, PA.

Branch Factory and Warehouse:
Tulsa, Oklahoma

Save time and annoyance—increase the output of your well and raise its standard of efficiency by using the "TEX" Plunger Working Barrel. Its initial cost will soon come back in time saved.

STANDARD WIELAND PIPE THREADING MACHINES



Patented

A post card will bring you our latest bulletin and a list of users.

Results are what count —not claims

An oil field is not the place for a weakling— whether human or mechanical. Strength, durability, power, results are what is needed.

STANDARD WIELANDS have proven their rights for oil field work by many years of hard practical experience.

It is a "roughneck" machine. Ruggedly built and simple in design it faithfully performs its work through every minute of the strenuous oil field day.

STANDARD ENGINEERING COMPANY

ELLWOOD CITY, PENNA.

San Francisco Office—Claus-Spreckles Building

Completions for Past Week in U. S. Fields

Oklahoma

Company, Well Location—	Initial Production Barrels	Depth
Beckham County—		
Grimes-Atlantic's Gardner 1, SW NW NE 35-9n-24w	*	3005
Simpson-Hale's Knight 1-A, NW SE NW 32-9n-23w	75	2940
Caddo County—		
Shinn et al's Johnson 1, NE NE SW 26-6n-10w	*	300
Carter County—		
Carter Oil Co.'s Ward 19, SE SW SE 16-4s-2w	65	3145
Magnolia's Tucker 3, NE SW SE 25-2s-3w	60	2830
Franklin's Gallagher 4, SW SW NE 25-2s-3w	50	2352
Amster Oil Co.'s Holman 2, NW NE SE 25-2s-3w	840	2543
Schermernhorn's Holman 4, NW SW 24-2s-3w	270	2754
Palmer 3, SW SW SW 32-2s-3w	50	3360
Franklin's Holman 2, NE SW SE 24-2s-3w	300	2806
Kirk et al's Bennett 10, SW NE SW 31-2s-3w	100	2655
Amerada Pet. Co.'s Farve 10, C NE SW NE 20-5s-1e	100	1551
Creek County—		
J. R. Grieves' Lowe 1, NW NE 13-19-8	15	2427
Phillips Pet. Co.'s Ellen Charles 1, SE NE SE 25-15-7	¶	3236
Marray Oil Co.'s Bearhead 1, C N L NW¼ 14-14-8	195	3268
Wiser Oil Co. Tah-co-we-nay 2, NE SE NE SE 9-16-11	15	1741
Garfield County—		
Jens-Marie's Senrad 1, SW NE SW 7-20-6w	*	950
Garvin County—		
Donaldson et al's Bell 1, NW NW SE 2-4s-3w	*	2526
T. & P. Oil Co.'s Richardson 6, NE SE NE 16-1-3w	*	1636
Grady County—		
Arresmith et al's Nall 1, NE NE NE 17-5n-7w	*	2246
Eller et al's Cox 1, SE NW NE 22-4n-8w	*	1585
Little Nick Oil Co.'s Heatley 1, NW NW SE 2-4n-8w	¶	1430
Jefferson County—		
Humble's Jackson 1, NE SE SE 16-6s-7w	*	3330
Lugg et al's Wray 1, SE NW SW 10-7s-6w	*	2963
Kay County—		
Alcorn Oil Co.'s Hubbard 1, C S L NW 12-26-2w	565	3714
Chambers 1, SE SE 9-25-2w	*	3434
Lincoln County—		
Mutual Oil & Gas Co.'s McCune 1, C S L N½ NW 17-15-3	*	1750
McIntosh County—		
Tiger Mutual O. & G. Co.'s Malvern 2, C SW SE 17-11-14	¶	975
Marshall County—		
Metz et al's Gardner 1, NE SE SE 30-5s-7e	*	420
Muskogee County—		
J. M. Bacon's Harrel 1, NW NE NE 22-15-17	*	1620
E. C. Lance's Bufington 1, NW SE 32-14-17	*	2135
Noble County—		
Healdton's Rence 13-A, SW NE NW 11-24-1w	340	2099
Rence 5-B, NE NW 11-24-1w	288	2101
Gypsy Oil Co.'s Clark 71, NE SE NW 2-24-1w	65	1835
Okfuskee County—		
Atlantic O. Prod. Co.'s Smith 1, SW NW 35-11-11	200	2501
Kansas & Gulf's Barnes 1, SE SW 19-11-11	30	2678
Fred Cusick's Hopwood 1-A, SE NW NE 11-11-11	25	1237
Okmulgee County—		
Okla. Nat. Gas Co.'s Tiger 7, C E L W½ SW 24-16-12	1400	2230
Chas. Noble's Miles 1, NE NW 19-15-12	15	1682
Mayberry et al's Jefferson 3, C N L NW NE 19-15-12	15	1675
Frost et al's Coleman 1, SW NE SE 18-15-12	*	1721
Kessler & Smith's Berryhill 1, SE NW 24-14-12	*	2830
Havel et al's Unknown 1, SW E½ E½ SW SW 31-13-12	¶	2550
Allied Ref. Co.'s Murrell 1, NW SW NW 26-13-11	15	2549
Osage County—		
Mid-Kansas's No. 10, SE SE 15-27-5	1000	3115
Dye-Tomlinson's No. 6, NW SE SW 15-27-5	300	3019
Twin States' McCassey 3, NW NW 15-27-5	425	3040
Carter Oil Co.'s No. 2, SW NW NE 22-27-5	720	3036
Skelly Oil Co.'s No. 6, NW SW SW 23-27-5	250	3021
Phillips-Skelly's No. 12, SE NE NW 23-27-5	700	3057
No. 11, SE NW NE 24-27-5	250	2980
No. 5, NW SW NE 26-27-5	225	3009
No. 14, NE NW NE 26-27-5	600	3038
Gypsy Oil Co.'s No. 16, SE NE 23-27-5	150	3009
No. 13, SE NW NW 19-27-5	40	2970
S. S. Home's No. 5, NWc NE NW SE 31-20-11	10	1821
Alexander-Shakeley's No. 4, NE NW 17-20-12	25	1500
Winona Oil Co.'s No. 1, NEc NW NE 29-20-12	25	1331
Mutual Oil Co.'s No. 7, NEc NW SE 32-24-8	*	745
Peters Pet. Co.'s No. 10, C W L SW NW 34-24-10	50	1351
Pawnee County—		
Magnolia Pet. Co.'s Thompson 1, SE NE 26-18-5	*	3892
Noble O. & G. Co.'s Miller 1, SE NE NW 17-20-6	8	2700
Watchorn O. & G. Co.'s White 3, C E L NE SE 17-20-6	90	3068
Pontotoc County—		
LaSalle Oil Co.'s Lewis 1, SE SE NE 31-5-5	25	1912
Seminole County—		
Holmes & Jarvis' Harjo 1, NW SW 22-10-8	256	3480
Gypsy Oil Co.'s Unknown 1, SW NW SW 28-8-8	1200	3108
Stephens County—		
Southern Coal Co.'s Taylor 1, SW NE NE 10-3s-5w	10	1040
Magnolia Pet. Co.'s Wilson 5, SW SE SE 17-2s-7w	100	1391
Pruitt 1, SE SE SE 2-2s-6w	*	4077
Bartley 7, SW SE NW 20-1s-8w	28	2341
Johnson 7, NE SW SW 18-1s-8w	¶	2192
McMan O. & G. Co.'s Bolton 3, SE NE NW 23-1n-9w	150	2177
Waldman-Schram's Adsins 1-A, SW SW SE 14-1n-9w	*	2230
Tillman County—		
H. V. Burton's Lawrence 1-A, NW NW NE 28-3s-14w	*	1310
Tulsa County—		
Shaffer O. & R. Co.'s J. Bruner 2, NWc NE SE 6-19-12	50	2067
Mutual-Bruner's No. 1, SWc SE NE 6-19-12	30	2118
Hivick & O'Reilly's No. 1, C W L SW NE 4-19-10	30	2159
P. H. Bartlett's Mussellan 1, NW NE NE 19-19-10	60	2150
Pawhuska Oil Co.'s Coppedge 2, SW SE 19-17-13	*	350
Winemiller et al's Brown 2, C S L SW SW 18-16-13	25	1084

Kansas

Company, Well, Location	Initial Production Bbls.	Depth
Butler County—		
Wentworth et al's Hazlett 1, SW SW 12-23-7	*	2875
Greenwood County—		
Mission Oil Co.'s Thrall 16, SW SE SE 27-23-10	50	2404
Thrall 27, SE SW SE 29-23-10	100	2356
Phillips Pet. Co.'s Lewis 6, C W L NW 32-23-10	110	2340
R. G. Gillespie's Jones 8, C S L N½ SW 21-23-13	15	1723
Cosden Oil Co.'s Griblin 9, C S L NW 21-23-13	15	1713
Transcontinental's Olson 2, C S L SW SE 11-24-9	200	2198
Hover et al's Hover 1, NW SE 27-24-9	*	2414
Mid-Kansas' C. Ladd 5, SW SE 19-25-9	200	2466

Arkansas

Smackover Field, Ouachita County—		
Burton Trust's Hughes 2, 28-15-16	100	2293
Gilliland Oil Co.'s Wells 2, 25-15-17	80	2262
Gulf Ref. Co.'s Harris 3, 30-15-16	135	2302
Harris 4, 30-15-16	60	2299
Patton A-1, 31-15-16	90	2260
Umstead A-4, 33-15-15	5	1977
Hale et al's Ward 2, 25-15-17	75	2305
Solmson 1, 29-15-16	75	2272
Hunt et al's Myar 1, 29-15-16	75	2272
Johnson et al's Hughes 1, 21-15-16	130	2290
McElroy 2, 29-15-16	300	2292
Lewis & Clark's Berry 6, 24-15-17	180	2296
Louann Smackover Oil Co.'s Mangus 1, 24-15-17	120	2294
Murphy Trust's Snyder 3, 34-15-15	200	1969
Phillips Pet. Co.'s Joyce 3, 33-15-15	100	2000
Smith Ref. Co.'s Patton 7, 31-15-16	125	2275
Standard Oil Co.'s Minor 1, 21-15-16	75	2292
Sid Umstead 11, 33-15-15	50	1967
The Texas Co.'s Chandler B-1, 30-15-16	505	2294
LaGrone 2, 30-15-16	70	2271
W. A. Smith 1, 31-15-16	120	2252
Walker et al's Mangus 1, 24-15-17	*	2430
Smackover Field, Union County—		
Arkansas Nat. Gas Co.'s Ferguson 3, 6-16-15	¶2	2287
Crosby Trust's Burns 1, 17-16-15	350	2068
Houston et al's Epps 1, 15-16-16, abn owner gone to Leavenworth	*	1920
Lion Ref. Co.'s Murphy 1, 8-16-15	225	2060
Magnolia Pet. Co.'s Child 1, 17-16-15	*	2620
Pure Oil Co.'s Craig 5, 15-16-15	100	2027
Sam Richardson & Co.'s Murphy 1, 23-16-15	*3500	1993
Roxana Pet. Co.'s Murphy A-3, 21-16-15	275	2062
Smackover Pet. Co.'s Murphy 3, 14-16-15	15	1995
Sun Co.'s Hays 7, 3-16-15	100	1972
Thorpe et al's Smith 1, 17-16-15	250	2030
Total, 33 wells	¶2-7485	

*Being blown by air.

California

Torrance—		
U. S. Royalties' 13	1100	3775
Ferd B. Foster's 67	100	3702
Fred B. Foster's 68	100	3750
Petroleum Securities' Marble 7	475	3800
Hub Oil Co.'s Stackowitz 2	500	3770
Petroleum Midway's Wilson Com. 5	50	3760
Thornburg 1	35	3775
McKeon Drilling Co.'s Lyman 1	65	3780
Shell's Marsh 2	700	3790
D. F. Peyton's Houghton 1	500	3765
Long Beach—		
Petroleum Midway's Griswold Star 1-A	1200	5009
Harlow 6	300	4751

Company, Well, Location	Initial Production Bbls.	Depth
Acme Pet. Co.'s Ramseur 4	525	3515
Lee & Ballen's 1-B	500	4939
Progressive Synd.'s Dobyn 2, wo	150	5151
A. T. Jergins' Long Beach 4, wo	1000	4887
Huntington Beach—		
Western Seaboard's Russell 2	100	4315
Petroleum Co.'s Wilson 1, wo	30	3500
Santa Fe Springs—		
Petroleum Midway's Mattern 2-5	365	4559
Standlee 3	10	4454
Standard's S. G. & J. 1	185	4650
W. L. Houghton 2	1100	4672
Wilshire Oil Co.'s Baker 3	200	4600
Fraser 6	480	4623
Union Oil Co.'s Howard 7	300	4712
Compton—		
Shell Co.'s Reyes 1	1250	4095
General Petroleum Co.'s Gardena 1	300	4860

Louisiana

Bellevue Field—		
Gulf Ref. Co. Bliss & Weatherbee 11, 10-19-11	5	368
Caddo Parish—		
Dixie Oil Co. Wells C-1, 15-21-15	*	1798
Cotton Valley, Webster Parish—		
Ohio Oil Co.'s (formerly Triange Drilling Co-Cotton Valley Synd.) Merritt 1, 14-21-10	¶15	2538
Monroe Gas Field, Morehouse Parish—		
Amalgamated Oil Co. Southern 1, 19-20-5e	¶9	2203
Southern Carbon Co. Spyker 11, 17-20-5e	¶4	2273
Monroe Gas Field, Ouachita Parish—		
Consumers G. Co. Richie 3, 32-19-5e	¶11	2221
Total, 3 wells	¶24	

SOUTH LOUISIANA

Edgerly—		
Gulf Ref. Co. of La. 22 Bright-Penn, wo	2250	2500
Vinton—		
Gulf Ref. Co. of La. 31 Vincent, wo	25	2325

Make Inquiry as to Working Barrel Steel

Tulsa, Okla., March 4.—Manufacturers of tubes that go into the making of working barrels have been included within the scope of the research work of the committee on standardization of working barrels of which G. A. Thompson of Bartlesville, Oklahoma, purchasing agent for the Empire Companies, is chairman.

A meeting of the committee was held here last week and a questionnaire has been framed and forwarded to steel tube manufacturers seeking information as to what goes into the making of the tubes used in manufacturing working barrels. It was the opinion expressed at the meeting that such tubes should be as hard as practical manufacturing problems will admit, thereby tending to reduce the factors of abrasion and wear. Tube manufacturers also are to be urged to expend some research work on the problems of corrosive action by the different fluids encountered in the pumping well.

It is said here that the executive committee of the American Petroleum Institute now is about ready to announce formal action on the various recommendations submitted at the last annual gathering in St. Louis. This will include the matter of rig iron standardization.

Texas

Company, Well, Location	Initial Production Bbls.	Depth
Bowie County—		
E. B. Guess' Hooks 1, John Barkman H-R sur	*	2149
Panola Gas Field—		
Magnolia Pet. Corp. Steele 6, B. C. Jordan H-R sur	¶15	1932

GULF COAST

Big Hill—		
Gulf Prod. Co. McFadden 1	*	4775
Goose Creek—		
Gulf Prod. Co. Paddock-Smith 10	115	2520
Hull—		
Gulf Prod. Co. Phoenix Dev. Co. 37	100	2130
Houston Prod. Co. Taylor 7, wo	650	3520
Republic Prod. Co. Dolbear 50, wo	250	3120
Dolbear 60, wo	500	2900
Higgins Oil & Fuel Co. Merchant 7, wo	*	3475
Orange—		
Humble Oil & Ref. Co. Chesson "B" 18, wo	*	4235
Richmond—		
Gulf Prod. Co.'s T. W. Davis 11	*	665
Spindle Top—		
Sheffield & Telshow et al Rowe 1	120	925

CORSICANA-POWELL

Derby Oil Co. Harvard 2	50	2950
Harvard 3	*	2942
Galloway et al Springfield 1	*	1850
Hoosier et al Woolens 1	*	1950
J. K. Hughes Dev. Co.'s Alexander 5	250	2935
Garland Kent et al's Flemming 20	300	2900
O. Berns et al Wilkerson 1	*	3010
Texas-Magnolia's Kent 17	50	1566
Thompson Hoosier et al's Hill 1	14,500	2985
Humble Oil & Ref. Co. Hill 3	6000	2992
Tidal Oil Co. Cerf 8	1200	2902
Atlantic Oil Prod. Co. Cunningham 1	575	2952
Sturbe & Sturbe 2 Hill	10,500	2952
J. K. Hughes Dev. Co. 7 Alexander	200	2945
Humphreys Oil Co. 24 Humphreys	500	2956
Longley et al 1 Swink, wo	650	2972
Tidal Oil Co. A-6 Ramsey	50	1650
Tidal Oil Co. A-10 Ramsey	50	1590
Hoosier et al Hill Tank Farm 1-DD	13,000	29,80

ARCHER COUNTY

Boller-Shaw et al L. F. Wilson 4	450	1583
P. F. Gwynn et al L. F. Wilson (blk 6) 3	400	1599
Hawkins & Hester Carter Bros. 3	75	1585
Humble Oil & Ref. Co. W. F. Parrish 2	*	1842
Kimmel & Dillard K. & K. 5	*	1798
Maer-Staniforth & Gwynn L. F. Wilson 1-C	*	1650
Mid-Kansas Oil & Gas Co. T. A. Matthews 1	*	2005
Murchison & Fain W. P. Ferguson 1	*	1803
Panhandle Ref. Co. J. L. Jackson 2	65	1811
Riner & Bailey L. F. Wilson (blk 29) 2	275	1616
R. M. F. Oil Co. L. F. Wilson 19-D	600	1590
Shamrock Oil Co. W. Harbinson 3	130	1335
Staley & Wynn K. & K. 1	250	1762
L. F. Wilson-Truex 2	200	1588
J. S. Stone et al K. & Kempner 2	*	1905
Texhoma Oil & Ref. Co.:		
Mrs. J. H. Carter 9	100	1380
L. F. Wilson 8-A	400	1601
L. F. Wilson 1-B	350	1596
L. F. Wilson 2-B	675	1592
The Texas Co. John Dormier 1	*	1905
W. F. Parrish 6	200	1589
W. F. Parrish 7	200	1590
W. T. Willis et al J. L. Jackson 1	55	1805

YOUNG COUNTY

Associated Oil Synd. J. W. Hughes 1	100	2615
McKenzie et al W. J. Logan 1	*	1275
Seaboard Oil & Gas Co. J. W. Hughes 5-A	40	2395
Union Oil Co. Whittenberg 1	50	2505

BURKBURNETT

Company, Well, Location	Initial Production Barrels	Depth
McDabb Oil Co. Saunders Est 2-A	*	1890
John O'Neil J. R. Sullivan 1	*	2105
Gulf Prod. Co. E. A. Dale 16	25	1870
Baldwin Bros. Langford-Kennedy 14	80	990
Murchison & Pigg Foster & Allen 1-A	100	1885
J. J. Perkins et al Saunders Est 5	75	1866

ELECTRA

Four States Oil Co. Mrs. G. Jennings 7	*	1850
Fisher & Gilliland J. A. Fisher 4-A	110	1575
Gulf Prod. Co. J. & J. Waggoner 3-C	40	1750
Hartford Trust Co. S. B. Burnett 6-A	*	1560
L. P. Hammond Mrs. G. Jennings 3	*	870
J. Jennings et al Mrs. G. Jennings 1	*	505
Ladd et al W. T. Waggoner 3	*	750
Magnolia Pet. Co. W. T. Waggoner 6-B	25	1460
J. J. Perkins S. B. Burnett 10	*	1710
J. J. Perkins et al S. B. Burnett 3	30	1353
Texhoma Oil & Ref. Co. W. T. Waggoner 28-A	80	1515
The Texas Co. W. T. Waggoner 286	*	1985
W. T. Waggoner 287	65	1470
J. J. Douglass et al Mrs. G. Jennings 1	12	435
Magnolia Pet. Co.:		
Burnett-Gladiolus 78	20	1780
Douglass-McDonald 9	5	930
Rio Bravo 30	100	1943
J. J. Perkins et al S. B. Burnett 2	40	1350
Rowe Drlg. Co. W. T. Waggoner 2	5	1860
Stacey & Greben S. B. Burnett 1	*	2000
Simms et al S. B. Burnett 16	†	1785
Texhoma Oil Ref. Co. W. T. Waggoner 15-F	110	1943

K-M-A AND IOWA PARK

P. B. Cox T. F. Mitchell 5	10	438
H. F. Fisher Parker 7	20	811
T. F. Hunter et al R. Michna-White 1	*	1600
W. J. Grisham et al R. C. Huff 1	*	1600
Hill & Roberts W. W. Overby 1	400	1501
Murchison & Fain:		
S. I. & H. Munger 1	*	1850
Kemp & Kempner 1	*	1855
Ross & Fields T. F. Mitchell 8	15	285
Shappell Oil Co. J. L. Jackson 5	200	1813
Texhoma Oil & Ref. Co. Mrs. Powell 1	*	1802
Carter & Inland Oil Co. K. & K. 2	100	1795
Kentucky Oil Corp. J. A. Kemp 2	*	1320
Norton & Turner G. B. Parker 1	*	1860
Ross & Fields T. F. Mitchell 7	25	435
T. O. Shappell Oil Co. J. L. Jackson 1	180	1803
Texhoma Oil & Ref. Co. Parker-Williams 1	*	1865

DESDEMONA-GORMAN

Beckett et al Allen 2	*	1000
McLester et al Dawson 1	*	1700

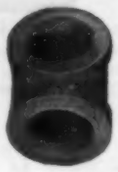
STEPHENS COUNTY

Killiam Prod. Co. Brown 1	*	3245
Pender Prod. Co. et al J. L. Keel 2	800	3283
Texas Pac. Coal & Oil Co. Newell 8	15	3400

Eastern States

PENNSYLVANIA

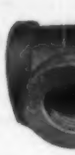
Greene County—		
Manufacturers Light & Heat Co. Throckmorton 1	*	3146
Keystone Oil & Gas Co. Dave Dukate 3	5	....
Carnegie Natural Gas Co.:		
F. R. Grimm 3	¶3	....
John Lazear 2	¶3	....



Long Life Is Built Into These Pipe Line

FITTINGS

Made by Gaso



Gaso fittings are toughly built to withstand hard service. Rigid inspection insures uniform quality, and Gaso standards are your guarantee of correct design and manufacture. Yet Gaso Fittings are not higher priced.

A complete line is at your command.

Gaso Pumps are the result of specialization plus experience. They have fewer but stronger parts and therefore stand up better. A complete line assures a pump exactly suited to the conditions, while a centrally located plant guarantees service in time of need. An efficient engineering staff is ready to give you expert co-operation in selecting the most efficient model for the work you have to do.

GASO PUMP & BURNER MFG. CO., TULSA, OKLA.

GASO PUMPS

for oil field uses

How Do YOU Remove Valve Seats and Liners?

DO YOU—

1. Cut them out with a torch?
2. Cut them out with a chisel?
3. Buck them out with steam?

OR—

Do you use the

DAVIS & KUHNS
Valve Seat and Liner Pullers

No matter how tight they stick, the D & K pulls them

For prices and sizes write

"MADE TO LAST FOREVER"

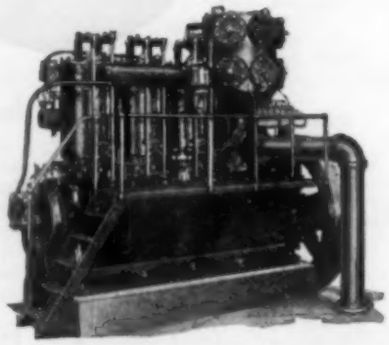
Davis & Kuhns

P. O. Box 427, R D 2 Fullerton, Calif.

REEVES

VERTICAL
Self-Contained
Gas Engine Driven
Compressor Unit

Sizes up to 300 H. P.



Single Or Two Stage Compressor Cylinder

MAXIMUM EFFICIENCY
MINIMUM SPACE
PROVEN RELIABILITY

FOR FULL DATA WRITE OR WIRE

Consulting and Contracting Engineers in Natural Gas and Oil.

HOPE ENGINEERING & SUPPLY Co.
Mt. Vernon, Ohio, U.S.A.

Branches Pittsburgh, Penna. Tulsa, Okla. Casper, Wyo.

Company, Well, Location—	Initial Production Bbls.	Depth
Allegheny County—		
Altoona Oil & Gas Co. Mohn 3	10	....
William Deer & Co. Keller 1	¶4	....
Washington County—		
Manufacturers Light & Heat Co. W. Hunter 1	¶3	....
WEST VIRGINIA		
Ritchie County—		
West Virginia Central Gas Co. E. McDonald 1	¶2½	....
Hope Nat. Gas. Co. A. Perrine 1	*	....
J. C. Hogue 1	*	....
J. E. Harshberger & Co. Harshberger 1	2	....
Goberts & Hays A. Lawrence 3	10	....
Carnegie Nat. Gas Co. S. S. Tharn 4	¶2	....
Wood County—		
Hogland Oil Co. E. Ogdin 5	10	....
E. S. Johnson & Co. H. H. Uhl 5	*	....
Smith & Watterson S. P. Allman 1	2	....
M. W. Larkin & Co. M. A. Ogdin 1	2	....
Roane County—		
Brown Farm Oil Co. A. F. Brown 2	2	....
Ohio Fuel Oil Co. Thos. Allen 4	5	....
S. D. Gibson 4	3	....
Taylor Bros. Wood Taylor 1	*	....
Marion County—		
Fairmont Gas Co. L. Ice 1	*	....
Eastern Pet. Co. Campbell Heirs 1	*	....
Hope Construction & Rel. Co. A. Halbert 2	¶1	....
Calhoun County—		
Hope Natural Gas Co.:		
D. K. Chenoweth 1	¶3	....
L. McDonald 1	5	....
Norris & Cain Nancy Jarvis 4	¶3	....
Parl Bowser W. S. Richards 1	10	....
Lewis County—		
Crooked Run Oil & Gas Co. H. L. Krause 1	¶3	....
Hope Natural Gas Co. J. R. Whitehead 1	¶3½	....
Gilmer County—		
Pittsburgh & West Virginia Gas Co. J. Woodford 1	¶2½	....
Hope Natural Gas Co. S. A. Hays 1	*	....
Braxton County—		
Pittsburgh & West Virginia Gas Co. G. B. Howell 1	¶3	....
Star Basin Oil & Gas Co. F. Waldeck 1	*	....
Boone County—		
Pure Oil Co. L. R. & A. No. 3 tract 11	15	....
Doddridge County—		
Hope Construction & Rel. Co. M. Smith 1	10	..
Kanawha County—		
Pure Oil Co. Williams Coal 136	5	....
Wetzel County—		
Johns Gas Co. E. W. Peterson 4	5	....
Pleasants County—		
Dresser Oil Co. R. & R. Corbet 7	2	....
Marshall County—		
Marshall-Preston Oil & Gas Co. Wm. Logsden 1	3	....
Hancock County—		
Myers & Co. Ashton 1	¶3	....
Wirt County—		
Parker & Daily E. Evans 1	*	....
KENTUCKY		
Warren County—		
Wiles & Co. G. Smith 2	45	1195
E. M. Treat & Co. Sebe Smith 19	15	1039
Ohio Fuel Oil Co. Kelly-Miller 3	3	1237
Makeever Bros. Shiels 13	9	591
M. Ennis & Co. Savage 3	*	510

Company, Well, Location—	Initial Production Bbls.	Depth
Owensboro Fields—		
C. E. Daugherty F. V. Miller 4..	15	746
Randolph & Stevenson Abe Howe 2	10	720
P. J. Thurman Tom Ralph 1.....	*	777
Allen County—		
White Plains Oil & Gas Co. Buchannan 21	*	525
Florida Interests M. B. Chism 6..	3	....
Simpson County—		
Western Engineering & Dev. Co. Pugh 12	40	491
Cumberland County—		
Dayton Oil Synd. Kin Crawford 3	*	425
SOUTHEASTERN OHIO		
Washington County—		
B. B. Putnam Little Ripley 50.....	2	....
Ohio Fuel Sup. Co. A. Williams 1..¶1¼		....
James Immel & Co. Peter Spindler 7	*	....
J. T. Dillon Henry Decker 2.....	*	....
Mary Mendenhall & Co. J. W. Mendenhall 3	*	....
Wm. Augustine & Co. John Wagner 2	*	....
Clarence Riley Ellis West 7.....	2	....
Forest Oil & Gas Co. Sam Edwards 6	8	....
Hill Top Oil & Gas Co. D. W. Burnett 1	2	....
Noble County—		
Ohio Fuel Sup. Co. E. C. Westcott 1 ¶¼		....
Vorheis & Co. S. M. Williams 4....	*	....
C. M. Eichorn & Co. John Huffman 3	*	....
Morgan County—		
Ohio Fuel Sup. Co. D. Eppley 2..	2	....
Licking County—		
Ohio Fuel Supply Co.:		
W. Coopenrider 1	*	....
L. S. Lake 1	2	....
Wehrle Stove Co. O. W. Minter 1.¶1½		....
Fairfield County—		
Carter Oil Co. Clay Weaver 8..... ¶½		..
Lewis Ruff & Son Milt Larimer 1..	5	....
Hocking County—		
Melchers & Co. Hattie Hysell 1....	¶1	....
Arkansas Fuel Oil Co. Bob Russell 1	2	....
Richard County—		
Brown, Warner & Henline Champion 3 ..... ¶½		1077
Van Tilburg & Greenwood Pettit Bros. 1 .....¶2½		1080
Medina County—		
Blackwood, Hieber & Co. D. Geisinger 2	2	462
Holmes County—		
Central Ohio Gas Co. H. Bowers 2	¶3	....
Perry County—		
Atha Oil Co. Melick Bros. 4.....	¶5	....
Knox County—		
Heisey Gas Co. C. C. Green 3.... ¶¼		....
NORTHWESTERN OHIO		
Mercer County—		
June Oil Co. B. Hellworth 2.....	2	1295
Kinstel & Co. A. Stamm 1.....	2	1293
Ed Anderson & Co. J. Stansbury 1	*	1400
Wood County—		
Ohio Oil Co. J. Weirick 19.....	12	1510
John E. Welton Lindermyer 5....	20	1278
Hardin County—		
Schmidt & Co. Ilo Carnes 1.....	¶2	1382
Mary Hereford 1.....¶2		1453
Van Wert County—		
Stanley Oil Co. N. Shelley 1.....	8	1310
Allen County—		
D. L. Thompson P. Engle 1.....	*	1375

Use Greyhound Products for "Speed and Endurance"

One Bearing Repaired

—*in two years*

is the total repair bill on

Boykin Greyhound Traveling Blocks

of one of the largest producers in the Gulf Coast.

They use Boykin Greyhound Traveling Blocks Exclusively

Every Boykin Block Is Guaranteed
They are built for Speed and Endurance

Write

Boykin Machinery & Supply Co.

Beaumont—HOUSTON—Shreveport

OILDOM, ITS TREASURES AND TRAGEDIES

By O. H. REINHOLT

Just off the press. The following is a condensed outline of contents:

THE PETROLEUM PANORAMA—International Treasures and Tragedies, etc. THE NATURAL RESOURCE. Nature, origin, surface signs of deposits, geologic occurence and distribution.

COMMERCIAL GEOLOGY—Description of the seven major American oil fields: Mid-Continent, California, Gulf Coast, Appalachian, Rocky Mountains, Illinois and Lima-Indiana.

MECHANISM OF THE AMERICAN INDUSTRY. Technologic Foundations, dearth of engineers, conservation of underground reserves, three great problems, the tragedy of poor recovery, conservation of capital through core drilling, wildcatting, etc.

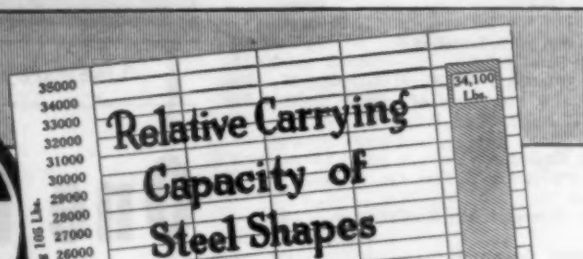
ECONOMIC ASPECTS OF PETROLEUM, etc. GASOLINE AND THE AUTOMOTIVE INDUSTRY, etc.

128 pages, 6x9, paper binding, postpaid $1.25

Send check to

THE GULF PUBLISHING CO., P. O. BOX 1307, HOUSTON, TEXAS

MOORE TUBULAR STEEL DERRICKS



The Strength of the Tubular Derrick

WHILE the I-shape is the strongest structural section that can be used as a beam, the pipe or tube is by far the strongest section that can be used as a column to carry compressive loads.

Engineers generally figure that the tube is from two to three times stronger than most other sections when used as a column. This is one reason why the MOORE tubular derrick met with almost instant success when, about 17 years ago, it made its first appearance in the petroleum fields. It was light and strong. It was easy to move and erect. And it stood up where other derricks failed. One feature which appealed to field men was that a leg, girt or brace, if lost or destroyed, could be instantly replaced with ordinary pipe, a material available around any derrick.

The chart above tells the story more eloquently than mere words. It reminds you forcibly of the fact that no matter how well a derrick may be built, no matter how much skill and care may be lavished upon its design, fabrication and erection, unless it is of tubular design, it must of necessity fall much short of being as strong as it might have been.

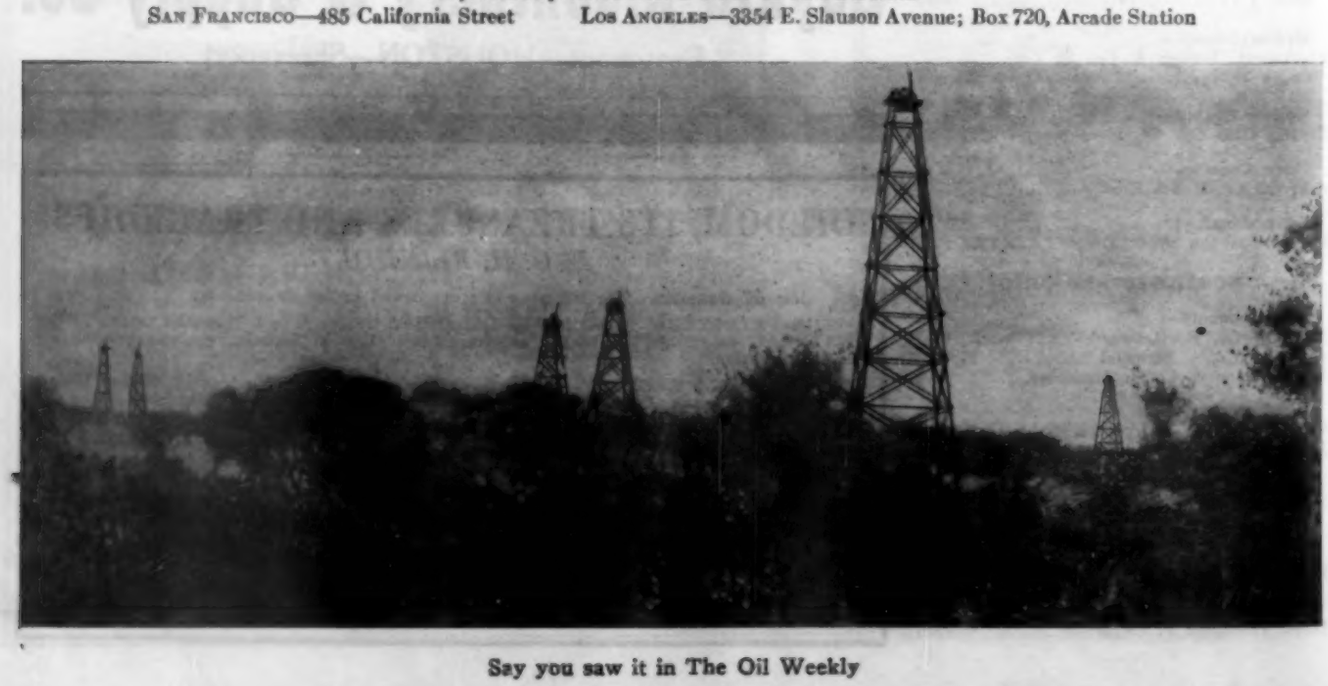
LEE C. MOORE & COMPANY, Inc., Pittsburgh, Pa.

ESTABLISHED 1907

CASPER, WYO.	DALLAS, TEXAS	TULSA, OKLA.	SHREVEPORT, LA.	PARKERSBURG, W. VA.
Midwest Building	Magnolia Building	Atlas Life Building	824 Prospect Avenue	Union Trust Building

California Representatives: BUCK & STODDARD

SAN FRANCISCO—485 California Street LOS ANGELES—3354 E. Slauson Avenue; Box 720, Arcade Station



Say you saw it in The Oil Weekly

Permits Granted and Locations for New Wells
(Arkansas—Louisiana)

ARKANSAS

Columbia County—Standard Oil Co.'s McRae 1, 25-15-20, NWc SE¼ NE¼.

Nevada County—Smitherman & McDonald's Womack A-1, 14-14-21, 200 ft N and W of SEc NW¼ NW¼.

Ouachita County—Atlantic Oil Prod. Co.'s Rowland A-3, 29-15-16, 330 ft S and E of NWc of sec; Wells A-2, 25-15-17, 200 ft S and E of NWc SW¼ SE¼. Clark et al's Berry 3, 24-15-17, 200 ft N and W of SEc SE¼ SW¼. Forrest Oil Co.'s Minor 3, 29-15-16, 330 ft N and 1120 ft E of SWc SW¼ NW¼. Gilliland Oil Co.'s Myar B-4, 30-15-16, 200 ft N and E of SWc N½ NE¼ SE¼. Gulf Ref. Co.'s Bennett 1, 32-15-15, 235 ft S and 195 ft E of NWc SE¼ NE¼, old well, to deepen. Patton A-2, 31-15-16, 200 ft S and E of center; Solmson 5, 29-15-16, 1110 ft N and 1700 ft W of SEc of sec. Hamilton et al's Smith 1, 36-15-17, 300 ft N and W of SEc S½ NE¼ SE¼. Humble O. & R. Co.'s Pharris 2, 34-15-15, 200 ft N and E of SWc NW¼ NW¼. Magnolia Pet. Co.'s Smith B-5, 31-15-16, 300 ft S and W of NEc SW¼ SW¼. Mangus et al's Fee 2, 24-15-17, 510 ft N and 150 ft W of SEc NW¼ SE¼. Murphy Trust's Snyder 4, 34-15-15, 200 ft S and W of NEc NW¼ SW¼. Reynolds et al's Cramer 1, 22-15-16, 200 ft N and W of SEc SW¼ SW¼. Standard Oil Co.'s Minor 2, 21-15-16, 330 ft N and E of SWc of sec. Sure Oil Corp.'s Fee 4, 30-15-16, 400 ft N and 200 ft W of SEc NE¼ SW¼. Sutton et al's Hughes 5, 29-15-16, 660 ft N and E of center of sec. Trammel et al's Shirley-Berg 1, 29-15-16, 160 ft S and 50 ft E of NWc SE¼ SE¼ NE¼.

Union County—Anderson et al's Bilieu 1, 8-16-15, 200 ft S and E of NWc SW¼ NE¼. Arkansas Fuel Oil Co.'s Alphin 2, 11-16-15, 200 ft N and E of SWc NE¼ SW¼; LeGrone 1, 1-16-17, 200 ft S and 225 ft E of NWc lot 1, E½. Bemment et al's Laney 1, 8-16-16, 200 ft S and W of NEc E½ NW¼ NE¼. Crosby Trust's Burns 2, 17-16-15, center of S line E½ NE¼ SW¼. Daniels et al's Ezell 2, 18-17-14, 200 ft S and W of NEc NW¼ NW¼ NE¼. Eason et al's Murphy 3, 15-16-15, 200 ft N and E of SWc NW¼ NW¼. Gulf Ref. Co.'s M. Alphin 6, 11-16-15, 1120 ft S and E of NWc of sec; T. D. Murphy 2, 7-16-15, 200 ft N and 1520 ft W of sec. Hollifield et al's Giller 5, 11-16-15, 200 ft S and W of NEc NW¼ SW¼. Lion O. & R. Co.'s Murphy 6, 18-16-15, 200 ft S and W of NEc NW¼ NE¼. Lyall et al's Fee 1, 3-16-15, 150 ft N and W of SEc SE¼ NW¼. McMurray et al's LeCroy 1, 17-16-15, 400 ft N and 163 ft W of SEc NE¼ NE¼. Murphy Trust's Lawton 3, 7-16-15, 200 ft N and E of SWc NE¼ SW¼. Natural Gas & Pet. Co.'s Murphy 2, 17-16-15, 200 ft S and E of NWc E½ NE¼ NE¼. Pure Oil Co.'s Merriweather 2, 6-16-15, 250 ft S and E of NWc NE¼ SW¼. Roxana Pet. Co.'s Murphy B-2, 15-16-15, 225 ft N and W of SEc NE¼ SE¼; E. G. Murphy 4, 21-16-15, 200 ft N and W of SEc NE¼ NE¼; T. D. Murphy 3, 7-16-15, 200 ft N and E of SWc SE¼ SE¼. Stewart et al's Goodwin 1, 21-16-15, 200 ft S and W of NEc lot 1, block 16. Sun Co.'s Wilson 1, 19-16-15, 200 ft S and W of NEc SE¼ NE¼. Tidal Osage Oil Co.'s Vestal 4, 17-16-15, 200 ft N and W of SEc SW¼ NE¼. Vecima Synd.'s Burton 1, 25-16-16, 200 ft N and E of SWc SE¼ NW¼ NE¼. Weissman Oil Co.'s Burns 1, 17-16-15, 200 ft S and W of NEc SW¼ NE¼ SW¼.

LOUISIANA

Acadia Parish—Coastal Oil & Fuel Co.'s McHugh 87, 48-9S-2W, N 84 degrees 3 minutes, E1515 ft from SW cor.

Bossier Parish—La. Oil Ref. Co.'s Fee D-18, 15-19-11, 499 ft E and 830 ft S of center of sec. Sun Oil Co.'s Ford Vance 2, 15-19-11, 513 ft S and 150 ft W of NE cor of SE¼.

Caddo Parish—Gulf Ref. Co.'s Ferry Lake 215, 15-20-16, 850 ft E and 300 ft N of SW cor of sec.

Calcasieu Parish—Vacuum Oil Co.'s Lock-Moore 2, 4-10S-9W, 1725 ft N and 975 ft E of SW cor of SE¼.

Cameron Parish—Johnson's Bayou Prosp. Co.'s Pavell-Grubbs 2, 12-15S-15W, 660 ft S and 1320 ft W of NE cor of SE¼.

Evangeline Parish—Ville Platte Pet. Co.'s Ortego 1, 42-4S-2E, 2100 ft E and 2500 ft N of SW cor of sec.

La Salle Parish—Bur Ban Oil & Gas Co.'s Urania 1, 21-11N-3E, 855 ft N and 64 ft W of SE cor SW¼ of SE¼.

Morehouse Parish—La Del Oil Properties' Fee 21, 28-20-5E, 300 ft W and 300 ft S of NE cor SW¼ of SE¼.

Ouachita Parish—La. Del Oil Properties Fee 23, 8-19-5E, 1620 ft S and 300 ft E of NW cor of sec. Palmer Corp.'s Spades 2, 33-19N-5E, 300 ft N and 300 ft E of SW cor of SE¼.

New York, N. Y., Feb. 23.—On his return to the United States from Europe, Harry F. Sinclair, chairman of the board of Sinclair Consolidated, declares the American petroleum industry will be called upon to supply large quantities of oil to European countries.

Don't "Skid the Rig" Because the Hole Is Plugged

A

Devil's Steel Hand

or

Devil's Pitchfork

Will Clean It Out

Thousands of dollars have been lost in skidding rigs on account of bad fishing jobs that plugged the original hole.

The ability of Devil's Steel Hands and Devil's Pitchforks to handle so-called "impossible" fishing jobs has saved many holes from being abandoned.

Either of these tools in your equipment is good insurance against plugged holes. They will fish anything from a one-inch nut to whole rotary bits.

Write for descriptive folder and prices

DEVIL'S PITCHFORK

DEVIL'S STEEL HAND

BROWN WELDING & MACHINE COMPANY

Main Office and Factory
BRECKENRIDGE, TEXAS
Rental Branch; 310 E. 3rd St., Tulsa, Okla.

Permanent Grounds for Exposition Selected

Construction work started on substantial buildings for annual oil equipment show

Tulsa, Okla., March 8.—The first guns of the International Petroleum Exposition and Congress, to be held in this city on October 2 to 11, have been fired and work of construction has begun.

The new exposition grounds which were formerly occupied by the warehouses and yards of the Prairie Oil and Gas Company are located in such a way that success is already insured as far as problems of traffic are concerned. Covering practically seven acres of ground, almost in the heart of the industrial section of Tulsa, the site is ideal for railway and electric connections.

The present site will accommodate almost three times as many exhibits and amusements as were represented last year. With ten large buildings already constructed and with plans for two new ones in the making, sufficient covered space for innumerable exhibitors to house their products is insured. Five of the present buildings are constructed of brick while five are of corrugated iron. The two new buildings will be of the corrugated type, the largest of which will be 60 by 380 feet and the other 50 by 200 feet.

The main avenue of the exposition grounds will be Oklahoma avenue, which goes through the entire length of the ground, a central passageway for the pedestrian while Pennsylvania avenue will run down the west side of the grounds and intersect Oklahoma avenue at a central point, making two spacious avenues of traffic through the grounds.

Each building and street has been named from some oil producing state but this does not mean that the exhibitors of these respective states will have their displays in these buildings. The names are strictly honorary and have no effect on the exhibitor. Other streets besides Oklahoma and Pennsylvania avenues, are Illinois avenue, Montana avenue and Indiana avenue.

In the Kansas, Ohio and Kentucky buildings, the heavy machinery will be installed. All noisy or moving machinery will find a place in these buildings, thereby insuring quiet in other parts of the grounds. All of these buildings are of brick construction.

In the California building, which is also of brick, the refinery exhibits will be housed, giving exhibitors of the refining industry a choice location for their displays.

In the West Virginia building, directly back of the California, the technical and scientific exhibits will be arranged along with the United States government exhibits and the Drake museum.

In the open space, on both sides of the Peoria avenue entrance, the heavy machinery, such as drilling rigs, engines, boilers and derricks, will be exhibited.

At each end of the circular exhibit houses, large columns of Doric architecture will be erected to make the entrance more attractive. Landscape architects have also been employed to make the grounds as attractive as possible during the summer months, by planting flowers and other plants.

A large auditorium is being arranged for moving picture and stereoptical displays. The place will accommodate about 350 people and will be used by the different exhibitors to run instructive reels of moving pictures. The United States government film, "The World Struggle for Oil," will be run each day without cost to the patrons.

The Frisco railroad will have a switch running into the grounds enabling heavy machinery to be unloaded at almost the same position at which it will be exhibited. Lighter equipment will be unloaded on a platform just outside of the fence surrounding the grounds. All shipments of less than car load lots will be unloaded onto this platform.

Just outside of the grounds at the Peoria avenue entrance, a space of ground covering approximately 15 acres has been leased as parking space for automobiles. A foot bridge will also be constructed over the Frisco tracks to run from the parking ground to the Peoria avenue entrance.

Madison avenue will be a one way street thus eliminating any traffic jam which might occur. After passing the Madison avenue entrance, cars will move up to Archer street and return to the city, making the entire distance from the down town hotels and offices on paved thoroughfares.

Allotment of space for exhibitors will be opened about the 15th of March and it is probable that many of the big exhibitors will make serervations just as soon as possible.

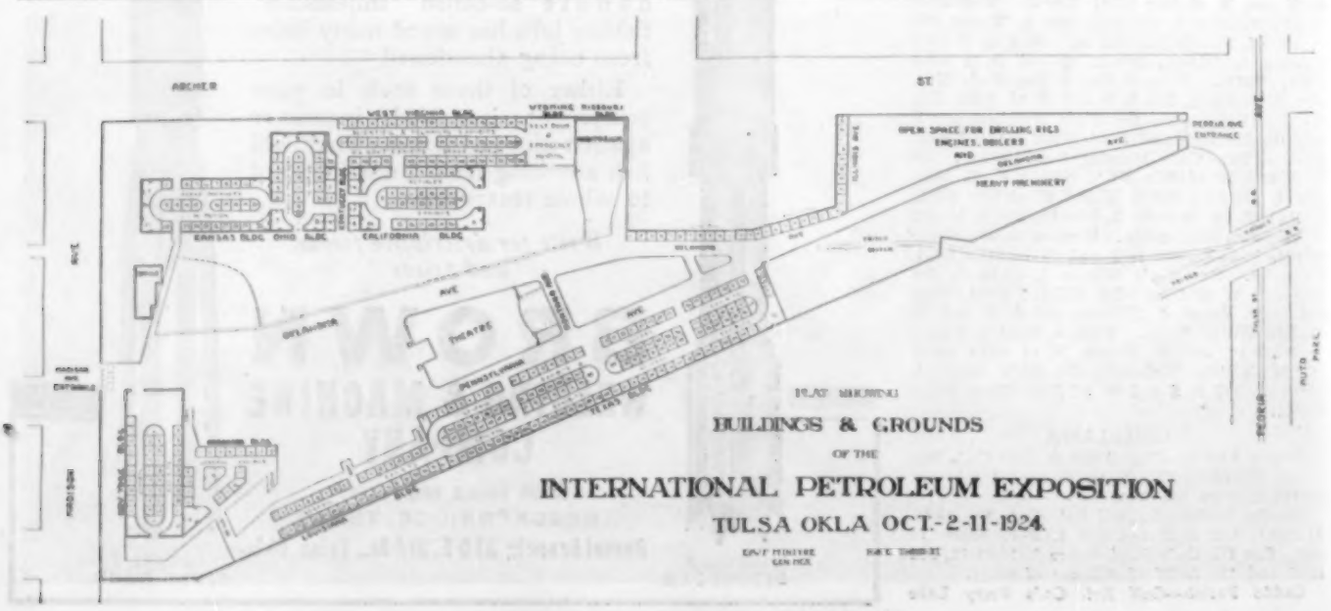
Directors of the International Exposition and Congress are very optimistic as to the outcome of this year's show. Preparations now being made will insure a complete arrangement in time for the opening on October 2, and running for 10 days thereafter.

HENRY P. WESTCOTT DIES

Erie, Pa., March 1.—Henry Palmer Westcott, authority on natural gas measurement, manufacturer and inventor, died unexpectedly at his home here February 27 after an attack of influenza which developed into pneumonia.

Mr. Westcott was 45 years old and a native of Seneca Falls, New York, where his factory for making valves is located. He annually visited the Mid-Continent field where he spent several months on each trip. Business associates, including officials of Westcott and Greis of Tulsa, Oklahoma, and Metric Metal Works of Erie, are here for the funeral services.

Mr. Westcott is survived by his widow and four children.



Wildcat Campaign Makes East Texas Rich

Marland lets a contract for two wells on 50,000 acre block; many companies active

Corsicana, Texas, March 3.—Enthusiasm developed by virtually all the major companies and numerous independent concerns and individuals within recent months over the wildcat acreage lying in the vicinity and on the path traversed by the Balcones-Mexia fault zone and minor fault regions across East Central Texas from the Corsicana-Powell field to Red River has resulted in the expenditure of enormous sums of money, collectively speaking, and in sufficient quantities to cause a general wave of prosperity to prevail among the farmers and other land owners on the approximate 100 mile strip believed to contain big flush fields similar to Mexia and Corsicana-Powell.

Leasing activity has spread from the Corsicana-Powell field into a part of 12 separate counties in a northeast to east trend across the state, and ranging from three to 20 miles in width at various points, according to the difference of opinion as to structural indications by the geologists engaged to select leases for purchase. Prices paid for leases on this long stretch of wildcat acreage range from $1 to $200 per acre, while an average for the territory is placed between $5 and $15, besides drilling obligations assumed in many instances.

The territory considered favorable for exploration begins northeast of Powell in Navarro County near the Bazette community, thence across the arm of Henderson County into the southeast corner of Kaufman County. The trend of play follows the Kaufman-Van Zandt County line to a point about opposite Wills Point, where geological information conflicts, as some of the companies and individuals have leased acreage in a northeast direction from Wills Point, while others have taken leases further north into the east half of Hunt County beyond the Katy railroad, then turning east at a point near the Hopkins-Delta County line. The play northeast of Wills Point crosses Rains County, via Point, into the upper part of Hopkins County. The trend of leasing activity in the past six weeks has taken a swing to the east and slightly north from the Hopkins-Delta County line involving parts of Red River, Franklin, Titus, Morris and Bowie Counties to the Arkansas state line. This last group of counties were the last to be invaded by the geologists and lease brokers, and all desirable acreage is being taken up by the major companies, independent concerns and lease brokers as fast as leases can be drawn up and signed.

The farmers and land owners were not long in discovering the interest shown by lease buyers in this territory, and have taken advantage of the competitive buying among oil concerns to boost their lease prices to unusually high levels for rank wildcat acreage. The presence of geologists and engineering corps on or in the vicinity of their lands often causes the farmers to develop a false impression that these workmen have information that oil underlies their farms beyond all question of doubt, and such cases create a difficult task for the lease buyer in obtaining signatures of these misguided persons on contract forms at prices within reason.

The bulk of the territory covered by this huge leasing campaign is only fair land for cultivation, while a quantity of it is not fit for crops, as is shown by the numerous mortgages held against the land as result of crop failures. However, the past year brought exceptionally good crops, especially cotton, for these farmers, and they are not as hard pressed for lease money as has been the case in previous years.

It is of interest to note that the territory in East Central Texas now holding the center of activity of lease buyers is well peppered with deep dry holes drilled in 1921-1922, and after the Mexia structure commanded nation-wide attention with its big flush production from the Woodbine sand pay. Information revealed by these failures is being used by geologists in working out the paths of the major and various minor faults known to exist in East Central Texas, and much time has been devoted in the past nine months in correlating logs of these dry holes. It is predicted by some geologists that the history of the Corsicana-Powell field will be repeated from the standpoint of obtaining production between two or more old dry holes, as this field had old dry holes on both sides of the southwest end of the producing structure.

The heavy investments made within the past year by oil companies on wildcat acreage in East Central Texas is going to be a big factor in bringing about early development of their holdings, besides their desire to curtail rental and lease tax costs, and the bulk of the large lease blocks are almost certain to be explored in 1924 or early in 1925. Drilling operations have already begun on a few tests, while sufficient locations have been announced to indicate that a drilling campaign of considerable proportions will be underway by spring. Adverse weather conditions and difficulty in transporting machinery and equipment to locations is interfering with the work already, and worse road conditions are anticipated when the spring rainy season gets underway.

The Marland Oil Company of Ponca City, Okla., which has acquired through its operating subsidiary, the Alcorn Oil Company, approximately 50,000 acres in drilling blocks and protection leases in East Central Texas, announced last week the location of two of a number of tests planned. One of the locations was made on the J. T. Cooperage farm in the southwest corner of Hopkins County, while the other is to be drilled on the King tract near Sabine River in the southwest part of Rains County. The Hopkins County test is in a 6000-acre block of leases owned by Marland, and is located about 3600 feet north and 150 feet west of the southeast corner of the Cooperage 140-acre farm, in the northeast corner of the N. Hamilton survey, about two miles southwest of Millers Grove.

Marland has about 9400 acres under lease surrounding its Rains County location, which is 1500 feet east and 1600 feet south of the northwest corner of the King 80-acre lease, N. G. Crittenden survey. Ed. M. Jones, drilling contractor of Corsicana, has been awarded contract for drilling both tests, and will start moving in materials immediately. The bulk of Marland's remaining acreage is located northeast and southwest of Wills Point, Van Zandt County.

Several miles to the northwest of Marland's proposed Rains County test, a block of about 5000 acres has been purchased by A. M. Yost and the Halmack Oil Company, and a test is to be started before June, 1924, in the Margaret Tollett survey.

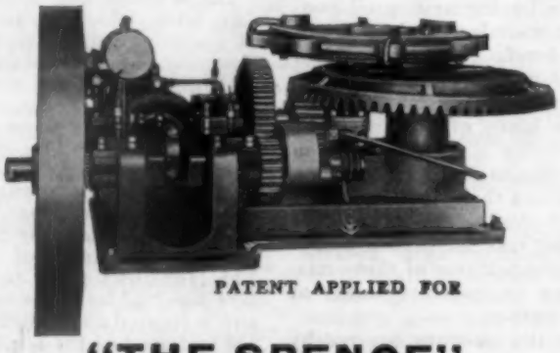
The Gulf Production Company has been a heavy buyer of Hunt County acreage, and is playing the fault zone further west than the majority of the other companies. It is reported that Gulf has made a tentative location on the J. C. George farm, E. Tidwell survey, about two miles southwest of the town of Campbell. Between the latter town and Commerce, Chas. Pettitt & Harlow Bros.' test on the J. C. Cole farm is reported to have logged the Nacatoch sand at 950 feet, and is now drilling in gumbo below 1200 feet. McPhail Oil Company's Miller 1 is shut down at 2165 feet, and has been idle for more than a year.

Activity in Kaufman County is getting underway on two new tests. The Boyd Oil Company's (Col. Humphreys) B. T. Rand 1, located at Prairieville, was spudded last week to meet lease requirements, and is now completing the work of rigging up, while in the northeast corner of the county, Judge J. A. Germany, Harty et al's W. S. Kirby 1, S. Edens survey, is drill-

ing in hard irregular formation around 1000 feet, with indications of being in the fault proper. In the same section of the county and only a short distance east of a dry hole drilled by the Humphreys Oil Company, Skinner and Lyles are moving in materials to start drilling on the Barrow farm, R. A. Terrell survey.

The Bazette community in northeast Navarro County has commanded the highest prices for leases, especially on acreage situated east of the town and near the Trinity River in the Newman, Harding and Hynote surveys. Mutual Oil Company has started rigging up for a test on the Mrs. C. W. Nowlin 65-acre lease, Harding survey, with only about 250 acres of protection acreage, while Col. A. E. Humphreys has let contract for a test to be drilled in the name of the Boyd Oil Company in the Newman survey, and only a short distance southeast of the Mutual test. Col. Humphreys has about 2250 acres lease in a strip extending in a northeast direction across the Armstrong, Broyles, Newman and Harding surveys, being about four miles long and about three-quarters of a mile wide. Col Humphreys also has a big solid block of leases west and north of Bazette.

An idea of the widespread attention being given the wildcat possibilities of East Central Texas can be obtained from the following list of companies being among those with protection acreage: Marland Oil Company, Skelly Oil Company, Mid-West Refining Company, Gulf Production Company, The Texas Company, Humble Oil and Refining Company, Pure Oil Company, Rio Bravo Oil Company, Simms Oil Company, Sun Oil Company, Atlantic Oil Producing Company, Magnolia Petroleum Company, Prairie Oil and Gas Company, Waite Phillips, Sinclair Oil and Gas Company, Rycade Oil Corporation, Halmack Oil Company, Tidal Oil Company, Mutual Oil Company, Boyd Oil Company, E. L. Smith Oil Company, U. S. Texas Oil Corporation, Arkansas Fuel Oil Company, Kirby Petroleum Company, and others, besides scores of independent operators.



PATENT APPLIED FOR

"THE SPENCE"

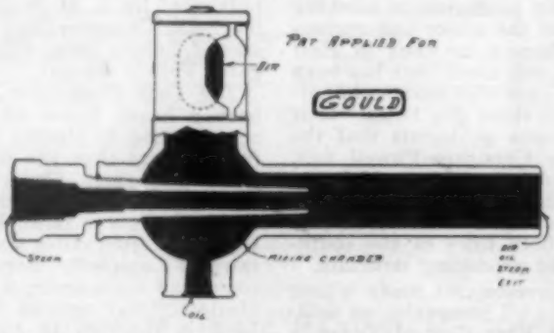
A combined gas engine and single eccentric pumping power with a 10½ H. P. gas engine, positive governor, gravity feed lubrication and wico ignition for gas or gasoline equipment.

This power has been pronounced by some of our largest producers as one of the best pumping units on the market for wells in territory of medium depth.

Manufactured and sold by

H. M. SPENCE

PARKERSBURG, W. Va.



With the Gould Oil Burner a small uninterrupted fire may be maintained—or a roaring blast—more than enough to obtain the full steam capacity of a boiler.

The fuel may be the heavy Mexican or very high gravity.

Its economy for many users is attributed to the primary air which it uses.

At Your "Supply" House—or the

GOULD BURNER COMPANY

Shreveport, La.

East Central Texas Wildcats

HENDERSON COUNTY—Hodges et al's J. C. & E. R. Cade 1 (Dorsey sur), dr 2750 ft. Miller & Kimbro's Dobbs 1, sd 2750 ft. Mutual Security Oil Co.'s Browning 1, dr 3050 ft. Richardson Bros.' J. C. & E. R. Cade 1 (southerland sur), sd for cas 300 ft.

HOPKINS COUNTY — Alcorn (Marland) Oil Co.'s J. T. Cooperage 1 (N. Hamilton sur), tmbs. Schriver et al's B. M. Harmon 1, dr 1155 ft.

HUNT COUNTY—Gulf Prod. Co.'s J. C. George 1 (E. Tidwell sur), lcn. McPhail Oil Co.'s Miller 1, temp abn 2165 ft. Chas Pettitt & Harlow's J. C. Cole 1, dr 1160 ft.

KAUFMAN COUNTY—Boyd Oil Co.'s B. T. Rand 1 (J. R. Reierson sur), spd and sd to complete rigging up. Judge J. A. Germany-Harty et al's W. S. Kirby 1 (S. Edens sur), dr 1000 ft. Skinner-Lyles et al's Barrows 1 (R. A. Terrell sur) tmbrs. Trapshooter Reily et al's Porter 1, temp abn 2955 ft.

FREESTONE COUNTY—Carter & Lytle et al's H. C. Hackney 1, cemented cas 2963 ft.

MILAM COUNTY—Beverly Oil Co.'s Buer 1, dr 850 ft. M. A. Culver et al's Bremond 1, fsh drl stem. Milam Uplift Oil Synd.'s Ashley 1, top chalk 2025 ft, dr in chalk 2190 ft. Roudtree & Simpson's R. E. L. Meyers 1, lcn. Texas Pet. Dev. Co.'s Bath 1, dr lime 2675 ft.

NAVARRO COUNTY—Boyd Oil Co.'s Newman sur 1, lcn. Mutual Oil Co.'s Mrs. C. W. Nowlin 1 (T. B. Harding sur) tmbrs. Webster & Pickens' Guy M. Gibson 1 (Julian Fontenoy sur), dr in chalk 2855 ft.

RAINS COUNTY—Alcorn (Marland) Oil Co.'s King 1 (N. G. Crittenden sur), tmbrs. A. M. Yost & Halmack Oil Co.'s Margaret Tollett sur 1, lcn. Dalley et al's Brown 1, spd and sd. Lovewell et al's Hunt 1, dk. Jim Jefferies et al's Corley 1, temp. abn. 1420 ft.

VAN ZANDT COUNTY—Brookins & Jenkins' R. P. Hughes 1 (E. Alvarado sur), lcn. Van Zandt Oil & Gas Assn.'s Jones 1 (J. N. Holt sur), sd on top chalk 2153 feet. Terrell Oil Co.'s (Porter & Holmes) J. T. Dunbar 1, sd for repairs 2480 ft.

Central West Texas Wildcats

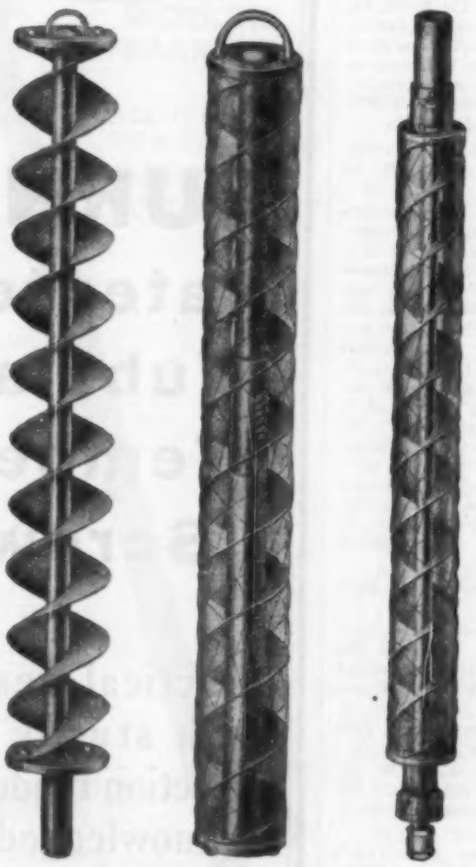
COMPLETIONS

Company, Well, Location	Initial Production Bbls.	Depth
Callahan County—		
Junior Oil Co. Thorn 1.....	*	2705
Palo Pinto County—		
Clark & Burch Mrs. L. F. Conklin 1	*	3885
Runnels County—		
Safety First Oil Co. Will Allen 1..	*	4000

DRILLING REPORT

BROWN COUNTY—Canyon Oil & Gas Co.'s B. W. McDonough 2, rig; McDonough 6, setting cas 1140 ft. Joe Cullinan et al's G. W. Pickett 1, sd 1135 ft. Carlton-Tippett et al's O. B. Fomby 1, sd 1315 ft. Infield Pet. Co.'s T. M. Windham 5, rig. Leonard et

For *Scientific* Plugging and Packing

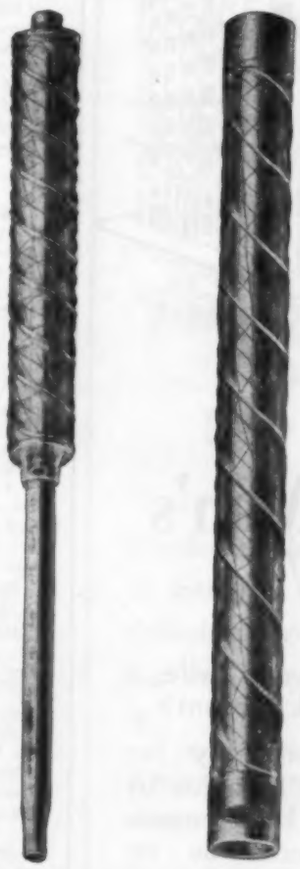


BOTTOM WATER PLUGS 3 STYLES

The Standard Plug (left) is for setting off bottom. The Collapsible Core Plug is for setting against extreme bottom, and the Wash-Down Plug (right) permits washing out of hole just before setting.

These plugs expand laterally, as they are set, so that outer edges of their spirals bite into the walls of the well.

Fully patented.



TUBING AND CASING PACKERS

Our Spiral Tubing Packer gives the same uniform lateral expansion and uniform compression of packing, as our Bottom Water Plugs. Never "freezes", as no rubber is used. Easily set. Easily removed. Gives a powerful, gas-tight pack.

Our Spiral Casing Packer represents the only uniformly successful casing packer ever developed. Used either as a formation packer or inside the casing, it gives a water, oil and gas-tight seal.

Fully patented.

THE GUIBERSON CORPORATION

Box 1106, Dallas, Texas
California Branch: 1737 E. 7th St., Los Angeles

314 New Daniels Bldg., TULSA
825 Mason Bldg., HOUSTON
506 Trust Bldg., NEWARK, O.

GUIBERSON

BETTER BE SAFE THAN SORRY

The Oil Man's Wife

HAS your wife a Bank account?

Does she pay her household accounts by check and keep the canceled checks as receipts?

She should. It simplifies housekeeping and makes it seem more worth while.

Open an account for her here. She may do her banking by mail.

Write us and we will explain how simple it is.

A Bank of Personal Service

Commercial National Bank

Shreveport, La.

al's Prather 2, sd 2370 ft. Maher Bros.' Bohara 1, co 2155 ft. Midway Pet. Co.'s L. L. Evans 12, lcn. Omaha Southern Oil Co.'s G. B. Gaines 2, sd 1690 ft. Patterson Oil Co.'s W. S. Westcott 5, lcn.

CALLAHAN COUNTY—Burleson Oil Co.'s Isenhower 2, sd repairs 1070 ft. Byron-Union Oil Co.'s Hennessey 1, sd 4045 ft. Chas. Dutton et al's Mrs. L. Cathey 3, setting cas 358 ft. Dudley Oil & Gas Co.'s Hugh Moore 1, sd 1750 ft. Hickey et al's E. L. Findley 2, ur 2660 ft; Mrs. L. Cathey 1, dr 850 ft. C. O. Moore et al's H. P. Faulkner 2, dr 610 ft. Pennant Oil & Gas Co.'s W. B. Bryson 2, dr 1245 ft. Seaboard Oil & Gas Co.'s Isenhower 1, sd 290 ft. Schaffner et al's James 2, dr 860 ft. Shackelford et al's Chas. Allen 1, sd 1675 ft. Andy Urban's Clinton 1, sd 1325 ft.

HOOD COUNTY—Corsicana Oil & Ref. I. A. Ryles 1, gas exhausted in pay at 2385 to 2395 ft, dr 2410 ft.

PALO PINTO COUNTY—E. Hess et al's Crocker 1, showing gas, moving back boiler, td 3405 ft. Harris et al's Weldon 1, sd 2675 ft. Haubert et al's Porter 1, sd 305 ft. Moore & Sneboldt's Pruitt 1, running 6-in cas 2995 ft; Boles 2, rigged up. S. W. Manning et al's R. Hitson 1, sd 3640 ft. Nelson Oil Co.'s Finch 2, shut in as gasser, td 4155 ft. Pender Prod. Co.'s L. C. Slemmons 1, sd 4135 ft. Phillips & Graham's J. A. Caudill 1, sd for cas 3080 ft. Scott & McCluer's Riverbed 1, fsh tools 3712 ft. H. L. Singleton et al's W. Holt 1, dr 4125 ft. Skelly Oil Co.'s Carter 1, dr 1750 ft. Texas Pacific Coal & Oil Co.'s J. H. Robinson 7, dr 860 ft; J. N. Stewart 145, dr 500 ft; Stewart 146, lcn. Upham Gas Co.'s Hartwell 1, dr 965 ft; Hartwell 1-B, dr 985 ft; Watson 4, dr 3395 ft. Youkan Oil & Gas Co.'s Seaman 1, sd 3965 ft.

BORDEN COUNTY—Kesselman Dev. Co.'s A. J. Long 1, rig.

BREWSTER COUNTY—Arco Dev. Co.'s H. L. Kokernot 1, sd 3765 ft. Brewster Oil Co.'s H. L. Kokernot 1, sd, 2535 ft. Portland Oil Synd.'s State 1, sd 3040 ft. Nine Points Oil Co.'s Peralto & Finnell 1, sd 1570 ft. Marathon Oil Co.'s Nigger Creek 1, sd 2350 ft; Wilson 2, sd 4000 ft.

COKE COUNTY—Ace Oil Co.'s W. C. Locke 1, spd and sd. Adkins Oil Co.'s J. R. Smith 1, lcn. Mexia-Equitable Oil Co.'s W. J. H. Hodges 1, sd 2505 ft.

CONCHO COUNTY—Dome Prod. Co.'s Mrs. C. M. Hartgrove 1, dr 200 ft. Signal Oil Co.'s Sam Waring 1, re-bldg rig 3203 ft. W. O. Schultz Oil Co.'s Schultz 1, sd 3225 ft.

CRANE COUNTY—Texas Dev. Co.'s J. Cowden 1, tmbrs.

CROCKETT COUNTY—Crockett County Drilling Synd.'s J. M. Shannon 1, dr 2370 ft; Shannon 2, lcn; Robt. Massey 1, sd 535 ft. Enders-Smith & Co.'s University 1, sd 810 ft. W. E. Ball et al's J. S. Todd 1, lcn. Mid-Kansas & Transcontinental Oil Co.'s Harris Bros. 1, dr 400 ft. Marathon Fold Drilling Club's L. P. Powell 1, dr 260 ft.

CULBERSON COUNTY—J. D. Wesner et al's Mack Sayles 1, sd 3105 ft.

DAWSON COUNTY—Lamesa Oil Co.'s John Burns 1, sd 2155 ft.

ECTOR COUNTY—Farmers Oil Co.'s Andy Newham 2, sd 1400 ft.

EL PASO COUNTY—Burns & Knight (was Cinco Minas Co.) Fee 1, sd with drill pipe in hole, td 4170 ft.

FISHER COUNTY—Pyron Oil Co.'s J. A. McCall 1, sd 3125 ft.

GLASSCOCK COUNTY—Cushing Ranch Drilling Assn.'s W. H. Sparkman 1, sd 1950 ft. General Oil Co.'s L. S. McDowell 4, sd 3685 ft. Associated Ref. & Prod. Co.'s C. I. Brunson 1, sd 2935 ft.

HUDSPETH COUNTY—Boole Oil Assn.'s Gardner et al 1, sd 1540 ft. Hueco Basin Oil Co.'s University 1, sd 2560 ft. William Loftus et al's Minnie Veal 1, dr 1045 ft.

HOWARD COUNTY—Big Springs Oil Co.'s Mabel O. Quinn 1, sd 3640 ft.

JONES COUNTY—Anson Oil & Dev. Co.'s C. B. Brown 1, sd 1855 ft. C-H Oil Dev. Co.'s J. A. Cullom 1, setting cas 3115 ft.

LOVING COUNTY—Ramsey Prod. Co.'s Russell 1, fsh cas 4485 ft; Russell 2, sd 810 ft.

MITCHELL COUNTY—The California Co.'s W. H. Abrams (T&P) 5, dr 1995 ft; W. H.

TEMPER BURNS SCREW

BURNS Patented Tubular Temper Screw

Practical design with sturdy construction render an acknowledged superior product.

for sale by all Supply Companies

BURNS TOOL COMPANY

Okmulgee, Oklahoma

HOUGH

SEAMLESS STEEL WORKING BARRELS

ACCURATE TO SIZE

UNIFORM QUALITY

DURABLE

STRONG

HOUGH SEAMLESS STEEL WORKING BARRELS EXCEL IN DEPENDABLE WORKING QUALITIES

BUY FROM YOUR DEALER

THE CHARLES N. HOUGH MANUFACTURING CO.
Pumping Equipment
Franklin, Penna.

STEELEX BALL AND SEAT

The best that's made for use in territory where you have excessive sand in the oil.

BRONZEX BALL AND SEAT

For use where lodestone or other elements which act on steel are in the water or where there is alkali in the water or oil.

Butler 1, dr 1490 ft; A. L. Miller 2, dr 2960 ft; Earl Morrison 1-A, dr 4210 ft; Morrison 2-A, pul big pipe 2815 ft; Earl Morrison 6-B, dr 2750 ft; L. C. LeSure 2, dr 2015 ft. S. A. Sloan Oil Co.'s Sam Smart 2, dr by tools with hole full oil, td 3005 ft; Smart 3, rigging up; Smart 4, bldg dk; Smart 5, tmbrs. Chal Daniel et al's W. D. Kynard 1, tmbrs. J. F. Carey et al's Earl Morrison 1, dr 2535 ft. Colorado-Texas Pet. Co.'s W. L. Foster 2, sd 2625 ft.

PECOS COUNTY—Trans-Pecos Oil Co.'s H. L. Thomas 1, sd 475 ft; Bennette et al 1, dr 1160 ft; Turney 1, sd 2610 ft; Johnson-Troy 1, sd 2965 ft. Southern States Lease & Prod. Co.'s J. M. Odem 1, sd 1305 ft. Oregon-Texas Oil Co.'s Turney 1, sd 3025 ft.

PRESIDIO COUNTY—Claude Byler's Toole Est 1, dr 560 ft.

REAGAN COUNTY—Big Lake Oil Co.'s University 4, dr 1790 ft; University 5, sd to repair engine, td 980 ft; University 6, dr 910 ft; University 7, spdg; University 8, 9 and 10, bldg dks. Benedum-Trees Interests' University 1, fsh tools 125 ft. W. H. Dunning et al's Sawyer Cattle Co. 1, lcn. Mid-Kansas & Transcontinental Oil Co.'s McIntosh Ranch 1, lcn.

REEVES COUNTY—Dixieland Oil Co.'s Oates 2, water trouble 4505 ft. W. S. Troy et al's H. G. Hersheusen 1, sd 415 ft. Bell Reeves Oil Co.'s Findley et al 1, sd 1540 ft. El Paso-Saragosa Oil Co.'s George Wirt 1, sd 540 ft. Parker-Hancock Oil Co.'s Johnson 1, sd 1930 ft. Willoughby Pet. Co.'s W. D. Cowan 1, sd 610 ft. Rodenbaugh et al's W. D. Casey 1, sd 845 ft. Pico Pet. Co.'s Johnson 1, sd 1930 ft. Texas Drilling & Dev. Co.'s Pecos Valley 1, sd 1105 ft.

RUNNELS COUNTY—Russell Prod. Co.'s Russell 21, sd 2500 ft.

SCURRY COUNTY—Col. A. E. Humphreys et al's H. P. Wellborn 1, dr 860 ft. The Loutex Corp.'s J. J. Moore 1, sd for pumping eqpt, est 30 bbls oil, td 3576 ft. Camp Springs Oil & Gas Co.'s L. E. Howell 1, lcn; W. R. Quinn 1, fsh 2830 ft; W. V. Jones 1, sd 605 ft. Hermleigh Oil & Gas Co.'s J. W. Burris 1, sd 3005 ft. Stanton Oil & Gas Co.'s J. W. Riley 1, sd 3505 ft. C. C. Brandon's J. A. Kemp 1, lcn. J. O. Guinn's L. Sturdevant 1, lcn.

STERLING COUNTY—Co-Operative Lease & Dev. Co.'s Douthitt 1, dr 1775 ft. Chicago Oil & Gas Synd's Durham 1, sd 1500 ft. Fidelity Oil Co.'s Hull 1, dr 1300 ft.

TAYLOR COUNTY — Abelene-Texas Oil Co.'s J. C. High 1, sd 2135 ft. Sanger Oil & Ref. Co.'s Hale 1, sd 3050 ft.

TERRELL COUNTY—Southwest Texas Oil & Gas Co.'s S. W. T. 1, sd 3515 ft. Pittsburgh-Western Oil Co.'s Chas. Downey 1, sd 1260 ft.

TOM GREEN COUNTY—Ranger Investment & Dev. Co.'s Harris 1, dr 3125 ft.

VAL VERDE COUNTY—East Del Rio Oil Co.'s E. F. Russell 1, sd 2120 ft. G. Cook et al's Bedell Moore Est 1, sd 1255 ft. Independent Operators' Whitehead 1, dr 2005 ft. Re-Clamation Oil Prod. Co.'s J. B. Moore 1, sd 2630 ft.

WARD COUNTY—Arthur Pitts Oil Co.'s Soda Lake 1, sd 2205 ft; River 1, sd 4675 ft. Cook & O'Brien's G. W. O'Brien 1, sd 1175 ft. Trans-Pecos Oil Co.'s Longnecker 1, sd 1765 ft.

San Antonio District Wildcats

ATASCOSA COUNTY — DeLange-Eiser Co.'s Tom 2, 6-inch casing set at 2800 ft.

GUADALUPE COUNTY—United North & South Oil Co.'s Shanklin 2, set casing. J. K. Hughes Oil Co.'s Harris 1, dk. Magnolia Oil Co.'s A. H. Schubert 1, lcn; Imhoif 1, dr below 2100 ft. Sam Burman et al's Fred Imhoff 1, dr 1800 ft. Trinity Drilling Co.'s Brinkdofer 1, lcn. Dixie Oil Co.'s 1, dr 850 ft. Armstrong et al's Baer 1, preparing to set 6-inch casing. McClallahan et al's Wiseman 1, dr 1980 ft. West Prod. Co.'s Baier 1, dr. Seguin interests' Tierman 1, waiting on casing

LUCEY

CHROME FISH TAIL BITS

Unanimous Verdict of Every User:

"Lucey Chrome Fish Tail Bits have **reduced our cost of bits per foot of hole drilled and reduced 'pulling out' time accordingly.**"

Repeat orders tell the story.

Send for Bulletin H-1 containing full information about **field heat treatment** to obtain best results.

"Wherever LUCEY There's Oil"

R. U. CULBERSON, Receiver

Lucey Manufacturing Corporation of Texas
Houston, Texas

Beaumont, Texas
Smackover, Ark.
Shreveport, La.
El Dorado, Ark.
Corsicana, Texas
Mexia, Texas
Dallas, Texas

STEEL

Plateau Oil Co.'s Blanks 2, lcn. Rycade Oil Co.'s Maierhofer 1, dr. "Jack" Johnson-Tindley's Daner 1, lcn.

JIM HOGG COUNTY—Miami-Balderas Oil Co.'s No. 1, dr. Richard et al's No. 1, preparing to dr deep test. Revere Oil Co.'s Davenport 1, dr. Diamond S. Oil Co.'s Doering 1, dr below 3000 ft. Homer & Tyson's Tyson 1, dr. Weber Oil Co.'s Holbein 3, dr 3285 ft. Humble Oil Co.'s No. 1, Sur 41, dr. Fresno Oil Co.'s Hinnant 1, dr. J. W. Pippin's No. 2, preparing to resume dr.

LIVE OAK COUNTY—Grubstake Investment Assn.'s J. W. Nichols 3, dr; Jim Nichols 2, dr. Olcheweske Oil Co.'s J. M. Brown 1, dr below 850 ft. Lobo Oil Co.'s Reagan 6, dr 1006 ft. Harkey Oil Corp.'s Herring 1, dr below 1100 ft; 2, dr. McCoy's Ross Murray 3, lcn.

MAVERICK COUNTY—Eagle Pass Oil Co.'s 2, dr. Southern States' Indio 1, dr.

MEDINA COUNTY—Wheless' Jose de la Roche 1, dr. B. J. K. Oil Co.'s Adams 1, down below 1100 ft. California-Medina Assn.'s Rothe 1, dr. McBride Drilling Co.'s Adams 1, Sur. 13, no report. Ina Oil Co.'s Durst 2, Sur. 15, cleaning out at 1000 ft. William Oil Co.'s Jungman 1, Sur. 104, dr. Middle States Oil Co.'s No. 1, Sur. 799, lcn. O'Bryan et al's Nixon 1, Sur. 14½, dr. Charles Jackson et al's Adams 1, Sur. 12, lcn. Jake Wolff et al's Louis Moefield 1, Sur. 532, dr. Young et al's Tom Brendle 1, dr. William Metzker's Ward 1, dk. Herman Haught's No. 1, Sur. 459, dr. L. N. Knight et al's Wipff 1, Sur. 16, dk. M. G. Haskell's Fritz Faselor 1, dr; Harrison 1, lcn.

McMULLEN COUNTY — Pioneer Prod. Co.'s Lowe 1, dr. San Balt Pet. Co.'s 4, setting casing. Pioneer Consolidated Pet. Co.'s Martin 1, dr 1681 ft. Bower Leasing Co.'s Fisher 1, installing star rig; 2, set 85 ft 10-inch casing. W. E. Everett's Stitz 1, down 976 ft; considering dr deep test. Arthur Inglis' Fisher 1, set 80 ft 8-inch casing. South Texas Oil Co.'s Calliham 2, preparing to spud in. Foley & Delaham's H. T. Calliham 1, set liner, good showing. Grubstake Investment Assn.'s Lark 6, waiting on casing; Nichols 3, rigging up. Head & Scarborough's 3, drilled plug out of casing at 300 ft. R. O. Kipp Oil Co.'s 1, set surface casing. Art English Oil Co.'s Stitz 1, dr 250 ft. B. C. Lightfoot & Son's No. 1, dr; Lark 1, 8-inch casing set. Three Rivers Oil Co.'s Stitz 3, spudding in. Fred Allen's 2, dr 210 ft. Cisco Pipe Line & Oil Co.'s Calliham 1, dr 785 ft. Laughter & Naiper's Stitz 1, sd 1004 ft; preparing to make deep test. L. E. Hill's Aycock 1, r from 1400 ft to 1502 ft. Southern Natural Gas Co.'s 1, set 80 ft surface casing.

North Texas Wildcats

COMPLETIONS

Company, Well, Location	Initial Production Barrels	Depth
Montague County—		
Rycade Oil Co. R. D. Beasley 1....	*	3300
Wilbarger County—		
Apple & Brandeberry's G. B. Ancell 1	*	2000

DRILLING REPORT

(Note—This report does not include tests that have been shut down indefinitely.)

BAYLOR COUNTY—Batchelder & King's Mrs. E. S. Wallace 1, lcn. B. Cranfill et al's W. B. Mills 1, dr 250 ft. C. B. Jetter et al's F. Gatzki 1, dk. Sunshine State Oil & Ref. Co.'s Mrs. E. S. Wallace 1, dr 200 ft. Wurtz et al's Porter Ranch 1, sd 1010 ft.

CLAY COUNTY—Crude Oil Producing Co.'s Kinder 1, sd 1060 ft. J. T. Cumley's J. D. Stine 1, moving in tools. Gulf Prod. Co.'s H. Boddy 1, dr 2840 ft; C. M. Worsham 3, dr 2860 ft. Hamilton et al's J. Harper 1, sd 800 ft. Lone Star Gas Co.'s N. H. Martin 3, dr 1200 ft; Withers subdiv 3, dk. Magnolia Pet. Co.'s Fee 10, dr 1320 ft. Menky et al's J. C. Hunt 1, rigging up. Nebraska Oil & Gas Co.'s W. H. Myers 1, sd 3346 ft. Scaling Oil Corp.'s Geo. Scaling 1, dr 1750 ft. Seaboard Oil & Gas Co.'s L. Zihlman 1, dr 1690 ft.

COOKE COUNTY—Big Indian Oil Co.'s B. W. Davis 1, sd 3050 ft. Red River Drilling Co.'s Whaley Jones 1, sd 1300 ft.

COLLIN COUNTY—Cyle et al's Walters 1, 1, sd 1500 ft.

DENTON COUNTY—Hill Crest Oil & Dev. Co.'s J. H. Rayzor 1, sd 1350 ft.

GRAYSON COUNTY—Zee Tex Oil & Dev. Co.'s G. W. Cannon 2, sd 3000 ft; Griffin 1, sd 2325 ft. W. R. Shankle et al's J. Marshall 1, dk.

HARDEMAN COUNTY—Frizell Oil Co.'s M. S. Winbury 1, sd 3075 ft.

HASKELL COUNTY—J. O. Galloway et al's F. S. Quade 1, sd 50 ft.

KING COUNTY—Banks Oil Co.'s J. R. Hailey 1, sd 1630 ft..

KNOX COUNTY—Brazos Bend Oil Co.'s J. E. Clark 1, sd 2000 ft. White Oil Corp.'s Ward Ranch 1, sd 2815 ft.

MONTAGUE COUNTY—Bowie Chief Oil Co.'s C. H. Boedeker 1, sd 2725 ft. Gulf Prod. Co.'s T. Benton 1, dr 3400 ft. P. F. Lesh et al's W. H. Wilson 1, dr 1440 ft. Mascho Oil Co.'s J. L. Howard 1, dr 2330 ft. Texon Oil Co.'s L. Crenshaw 1-A, dr 3020 ft; L. Crenshaw 1-B, sd 1250 ft.

THROCKMORTON COUNTY—Adams & Kinnard's Reynolds Cattle Co. 1, machine on ground. Ashcraft et al's Polk County School Land 1, sd 1050 ft. Graves & Burton's Reynolds Cattle Co. 1, dr 100 ft. Hale Tex Oil Co.'s B. F. Reynolds 1, dr 500 ft.

WILBARGER COUNTY—J. S. Dennis' W. G. Beckett 1, sd 1100 ft. Ferguson & Watson's W. T. Waggoner 1, testing 1535 ft; Waggoner 2, dr 1528 ft. Herrington & Robinson's McCaleb 1, sd 2500 ft. Magnolia Pet. Co.'s W. R. Piper 44, dk. W. A. Matlock & Co.'s W. T. Waggoner 1, dr 500 ft. Noble Oil Co.'s W. T. Waggoner 1, dr 1260 ft. South Vernon Oil Co.'s W. H. Stephens 2, dr 50 ft; Stephens 3, dr 250 ft. T. & P. Oil & Coal Co.'s A. Smith 1, rigging up.

Send the Coupon for Information

IF YOU'LL just read the coupon below you'll find that it isn't a subscription blank for fake stock, nor in fact anything more dangerous than a mild inquiry. You've been reading about this Stewart Safety Sucker Rod Hook—now be a sport and find out some more about it.

If you've forgotten what we've already had to say about it, here's a brief review:

Made by the Pelican Well Tool & Supply Company, manufacturers of the PELCO line of oil country equipment, and who are good people to do business with. Made over-size, of extra good steel, and actually swivels when swivel it should. Safety latch lifts up readily, but no power on earth can PUSH it up.

Now mail the coupon!

WALTER O'BANNON CO.
Sole Distributors
817 East First Street,
Tulsa, Oklahoma.

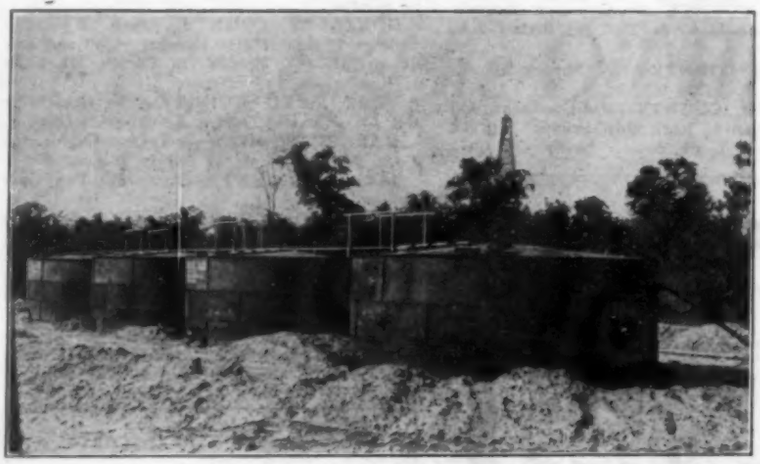
Gentlemen: Some time I might want to buy one of your sucker rod hooks. Give me your dealer's name in this territory and shoot me a folder. Much obliged.

Name.....Job.....

Company.....

Address.....

PERFECTION VAPOR PRESSURE TANKS
WOOD, AND BOLTED STEEL TANKS



You will find PERFECTION batteries in every important oil field in the country. The picture on the left was taken at Burbank where there are many PERFECTION owners. There are Perfection representatives in every important locality.

A Standard of Comparison

A make or brand of tanks that does not embody those principles which has made the word "PERFECTION" a synonym for the best in oil field storage will not get to first base with oil producers. For instinctively they ask themselves these questions when the purchase of lease storage is under consideration:

1. Will the tank eliminate evaporation?
2. Will it increase the gravity of the crude?
3. Will it pay dividends in dollars and cents?
4. Is the fire hazard made negligible?
5. Is the tank properly constructed to stand the strain?
6. Is the special apparatus for cheating evaporation fool-proof?
7. Will it pay for itself?

Those seven questions constitute the Perfection Standard of Comparison. And the wise producer will not be satisfied with the tank that is being compared.

He will buy the Perfection Brand, the Standard Lease Tank of the oil fields, for which the answer is "yes" on every question.

Black Sivalls & Bryson
INC.

BARTLESVILLE ~ OKLAHOMA

Branch offices in all principal active fields

Texas Panhandle Wildcats

(Note—The drilling report below does not show wells that are shut down indefinitely.)

CARSON COUNTY—American Ref. Co.'s S. B. Burnett 1, dr 50 ft. Culbertson Bros.' V. B. Armstrong 1, sd 175 ft. Gulf Prod. Co.'s S. B. Burnett 3, bailing, td 3150 ft. W. W. Silk et al's S. B. Burnett 3, dr 2750 ft. The Texas Co.'s Mary C. Burnett 1, dr 1550 ft; Mary C. Burnett 2, set cas 325 ft; S. B. Burnett 3, dr 2744 ft. Tipton, Stone et al's McConnell 1, sd 3028 ft.

COTTLE COUNTY—T. J. Woodley's A. C. Dulaney 1, dr 150 ft.

GRAY COUNTY—W. H. Holmes et al's J. S. Morse 1, dr 1875 ft. The Texas Co.'s G. H. Saunders 1, running cas, td 2500 ft.

HUTCHINSON COUNTY—Coline Oil Co.'s M. Sandford 1, shut down, estimated 250-barrel well, td 3220 ft. Humphreys Oil Co.'s Johnson Bros. 1, fsh 2600 ft. Montgomery Oil Co.'s Johnson Bros. 1, cementing cas 1925 ft. Plains Oil Co.'s J. F. Weatherly 1, sd 3260 ft. Producers & Refiners Co.'s L. Bivens 1-B, dr 2575 ft. Watchorn Oil Co.'s Cable 1, dr 1110 ft. Wilson et al's Johnson Bros. 1, set cas 300 ft.

HEMPHILL COUNTY—Piney Oil Co.'s Hopkins 1, sd 3100 ft.

MOORE COUNTY—Producers & Refinerers Co.'s Masterson 1, dr 335 ft.

POTTER COUNTY—Producers & Refiners Co.'s L. Bivens 1-A, dr 2800 ft; Bivens 2-A, dr 2110 ft.

ROBERTS COUNTY—Roy Shenck et al's O. Laughlin 1, dr 378 ft.

WHEELER COUNTY—Mid-Continent Oil Synd.'s Ember 1, lcn. Roy Schenck et al's J. F. Bradley 1, dk down. Skelly Oil Co.'s Davis Bros. 1, dr 4100 ft. H. C. Tyrell et al's F. E. Sheldon 1, dr 1750 ft. J. Whittington's Williams & Laycock 1, dr 2000 ft.

It's a Wilson

You can't go wrong with a Wilson Tong

When you think of drilling—think of Wilson-Tonging

Wilson & Willard Mfg. Co.
MANUFACTURERS

It's a Wilson

Distributed By WILSON OIL TOOLS CORPORATION

Houston, Texas
619 West Bldg.

Factory and Distributors Office
2301 E. Vernon Ave.
Los Angeles, California, U.S.A.

Tulsa, Okla.
609 Atlas Life Bldg.

Cosden & Company

HIGH GRADE
PETROLEUM PRODUCTS

TULSA, OKLAHOMA

Coastal Wildcats

AUSTIN COUNTY—W. W. Johnson and H. R. Carroll's San Felipe De Austin 1, sd waiting for fuel.

BRAZORIA COUNTY—The Texas Co.'s South Texas Dev. Co. blk 2, No. 1, dr 2265 ft in gumbo.

GONZALES COUNTY—Bryan & James Billings 1, core at 2616 showing of oil and gas, dr at 2625 ft. Rycade Oil Corp.'s Mierhofer 1, rigging up.

FORT BEND COUNTY—The Pathfinder Oil Co.'s Davis Trustee 1, dr below 600 ft.

HARRIS COUNTY — Texas Exploration Co.'s Warren 17, dr at 600 ft in gumbo.

JACKSON COUNTY—Vanderbilt Pet. Co.'s Seliner 1, sd.

JEFFERSON COUNTY—Houston Oil Co.'s McFadden 2, skidding dk; Pipkin 8, standing; Staiti 3, spdg in. Rycade Oil Corp.'s McFadden 2, dr at 4790 ft in water sand; Kishi-Lang 2, dr deeper, 3900 ft; Kishi-Lang 4, dr at 300 ft.

MATAGORDA COUNTY—Rycade Oil Corporation's Gray 1, dr at 2256 ft in hard sand; Hudson 2, making new hole at 3058 ft.

Louisiana Wildcats

COMPLETIONS

Company, Well, Location—	Initial Production Bbls.	Depth
Union Parish—		
Davidson & Palmer Green 1, 19-23-1e	*	2800
Roxana Pet. Co. Smith 1, 30-22-2w..	*	2294
Webster Parish—		
Palmer & Blount's Anders 1, 6-18-10	*	1204

DRILLING REPORT

BIENVILLE PARISH—Arkansas Fuel Co.'s Harrell 1, 6-18-5, dr 2050 ft. Ohio Oil Co.'s Bodcau 1, 19-16-6, dr 3050 ft. Smith et al's Durrett 1, 34-18-5, dk.

BOSSIER PARISH — Atlantic Oil Prod. Co.'s Bodcau Lumber Co. 1, 24-23-12, dk. Bolinger et al's Bodcau Lumber Co. 1, 15-23-12, lcn; Bolinger 1, 3-22-12, testing show of oil and sw at 2722 ft. Hoover et al's Freeman 1, 15-18-12, dk. Sneed et al's Jones 1, 23-18-11, sd 400 ft. Tarver Pet. Co.'s Bolinger 1, 15-22-14, sd 2657 ft. Zink & Kurbert's McGuffin 1, 4-18-11, sd 460 ft.

CADDO PARISH—Alabama Pet. Co.'s Barlow 1, 5-21-15, dr 3740 ft. Brewer & Sewell's Sharp 1, 15-18-16, dr 2715 ft. Caddo Western Gas Co.'s Gardner-Blades 1, 2-16-15, sd 2056 ft. Collins et al's Levy 1, 23-19-14, dk. Crude Oil Co.'s Alexander-Ledbetter 1, 27-16-14, dr 3105 ft. Louisiana Pet. Co.'s Brewer 1, 33-23-15, dry 2903 ft, dr 2925 ft. Matson et al's Nickerson 1, 30-19-15, dk.

CALDWELL PARISH—Culver et al's Culver 1, 21-14-40, rig.

CLAIBORNE PARISH—Block O. & G. Co.'s Aubrey 1, 20-21-8, resumed operations, dr 1360 ft. Collins & Woodley's Reynolds 1, 30-21-4, lcn. Triangle Drilling Co.'s Ranich 1, 17-22-5, sd 2650 ft.

DE SOTO PARISH—Tarver et al's Mathews 1, 32-12-11, dr 750 ft. Terrell et al's Porter 2, 15-12-13, dk. Ulrey et al's Frost-Johnson 1, 3-11-15, dr 2145 ft.

LA SALLE PARISH—Helm & Burch's Urania 1, 21-11-2e, dr 535 ft. Stovall Drilling Co.'s Central Lumber Co. 1, 27-10-23, rig. Urania Pet. Co.'s Urania 2, 20-10-2e, sd 2120 ft; Urania 3, set 6-in 1563 ft.

LINCOLN PARISH—Four Creeks Oil Co.'s Colvin 1, 35-20-3w, sd 2200 ft. Greer & Gault's Simmons 1, 25-18-1w, dk. Middlefork Synd.'s Kay 1, 8-20-3w, sd 2625 ft, sw flow.

OUACHITA PARISH—Haynes Oil & Gas Co.'s Dixie Lumber Co. 2, 17-17-3e, set 6-in 2568 ft.

UNION PARISH—Berry & Roberts' Smith

Did You Borrow This Copy of The Oil Weekly?

If you did that's alright; we urge you to read it each week even if you have to "hi-jack" it, but that isn't necessary, for you can get it put on your desk or the reading table in your home for

Only $1.00 PER YEAR

Less than 2 cents per week

Send In the Coupon NOW!

We Thank You—

Here's the Order Blank

THE OIL WEEKLY

P. O. Box 1307 Houston, Texas

Enter my name for one year's subscription to The OIL WEEKLY, for which you will find enclosed check for $1, as payment in full.

Name.....

Street and No.....

City and State.....

Please check below branch of industry engaged in:

Producing Executive ◇ Field Man ◇ Pipe Line ◇

(BE SURE TO CHECK CLASSIFICATION, otherwise we will have to hold up entering your subscription until we can get the information from you.) 3-8-24

1, 16-22-1e, lcn. Cargile et al's Heard 1, 25-21-3w, rig. Davidson & Palmer's Frost-Johnson A-1, 17-23-1e, sd 77 ft. Dawson & Perritt's Hodges 1, 27-19-1e, dk tmbrs. Evans et al's Cole 1, 16-22-2e, dr 2390 ft. Freazel et al's Green 1, 19-23-1e, sd 80 ft. Gulf Ref. Co.'s Green 1, 19-23-1e, dry 2241 ft; sw 2245 ft; Security Trust 1, 23-23-1w, bailed cas dry, waiting for drill stem, 2070 ft. Lide et al's Templeton 1, 18-23-1e, sd 950 ft. Neddo Pet. Investment Corp.'s Smith 1, 2-23-3w, to set 6-in 2138 ft. Noe et al's Gulley 1, 36-21-1e, set 6-in 2070 ft. Ohio Oil Co.'s Adkins 1, 30-23-1e, dk tmbrs; Dubach Lbr. Co. 1, 15-20-1w, dr 2575 ft. Tarver et al's Rhodes 1, 30-21-1w, dr 2300 ft. Union Parish Drilling Synd.'s Fee 3, 17-23-1e, sd 2287 ft.

WEBSTER PARISH—Fortuna Oil Co.'s Pruitt 1, 17-21-9, dr 2105 ft; Stratton 1, 31-22-10, dr 2700 ft. Humble O. & R. Co.'s Babb 1, 14-21-10, rig; Webb-Merritt 1, 13-21-10, set liner 2581 ft, to bail. O'Brien et al's Dales 1, 26-21-9, dr 2955 ft. Ohio Oil Co.'s Merritt 2, 14-21-10, lcn. Oil Fields Gas Co.'s Hope B-1, B-2 and B-3, 13-21-10, lcns. Palmer Corp.'s Miller 1, 29-21-10, to resume dr 3378 ft. Smitherman & McDonald's Boucher 1, 21-23-11, dr 2600 ft. Snyder et al's Hodges 2, 15-21-10, set 6-in 2468 ft. Stack & Egger's Bible 1, 8-20-9, fresh water 100 ft. White Oil Corp.'s Gleason 1, 31-22-9, dr 1070 ft.

Arkansas Wildcats

CALHOUN COUNTY—Harris & Bickley's Freeman-Smith 1, 26-16-13, sd 1152 ft. Vitex Oil Co.'s Adams 1, 29-12-12, set 6-in 2575 ft; td 2645 ft.

CLARK COUNTY—American Drilling Co.'s Wilson 1, 15-8-22, sd 440 ft. United Pet. Co.'s Langford 1, 28-5-23, sd 2200 ft.

CLEVELAND COUNTY—Clark & Melat's Wilson 1, 12-8-12, dk. Rex O. & G. Co.'s Ward 1, 18-11-11, sd 1115 ft. Southern Arkansas Oil Co.'s Moore 1, 27-9-10, sd 2150 ft; Oeschner 1, 14-9-9, dk.

COLUMBIA COUNTY—Brown et al's Robinson 1, 23-18-23, sd 2844 ft. De Soto & Hickman's Fullenwilder 1, 3-16-21, sd 1070 ft. Dowdy et al's Fullenwilder 1, 12-17-22, set 6-in 2070 ft. Hosey et al's Haire 1, 30-19-18, sd 2156 ft. Miller et al's Watts 1, 20-16-18, sd 1990 ft.

DALLAS COUNTY—Conway et al's Riggs-Matlock 1, 33-8-15, sd 1805 ft. Langley et al's Coleman 1, 6-10-14, dk.

DREW COUNTY—Graves et al's Karnes 1, 10-13-6, set 8-in 1748 ft. Rhodes et al's Martin 1, 27-12-8, cas parted 1529 ft.

GRANT COUNTY—Grant County O. & G. Co.'s Cargile 1, 26-5-12, sd 2160 ft. The Texas Co.'s Chicago L. & T. Co.'s 1, 14-6-13, sw 2383 ft.

HEMPSTEAD COUNTY—Dudney et al's Spates 1, 19-12-27, sd 2000 ft. Hope Columbus Oil Co.'s King 2, 24-11-25, set 5 3/16-in cas 2145 ft and perforated to test. Johnson et al's State 1, 12-13-27, sd 730 ft. Martin et al's Adams 1, 36-12-27, sd 2207 ft. Meyer et al's Nicholls 1, 17-11-25, r 1865 ft.

LA FAYETTE COUNTY—Ken-Saw Pet. Co.'s Red River 1, 34-19-24, sd 2823 ft. Lewisville Synd.'s Osborne 1, 16-15-24, sd 2528 ft.

LITTLE RIVER COUNTY—Gaines et al's Thomas 1, 15-13-29, ur 1890 ft. Johnson et al's Hawkins 1, 10-11-31, sd 960 ft. Red River Valley Oil Co.'s Taylor 1, 29-13-29, sd 2790 ft.

MILLER COUNTY—Cochran & Ray's Adams 1, 4-14-27, sd 2850 ft. Kress et al's Thompson 1, 33-14-28, sd 500 ft.

NEVADA COUNTY—Arkrado Oil Co.'s McCain 1, 36-10-23, rig sd. Anderson & Edwards' Eaves 1, 11-12-23, sd 180 ft. Carter et al's Bailey 1, 31-13-21, sd 400 ft. Kan-Ark Pet. Co.'s White 1, 11-13-21, dr 8-in plug 1164 ft. Miller-Burnham-Hawley Synd.'s Perry 1, 12-15-22, dr 1870 ft. Prescott Oil Co.'s Henry 1, 10-12-20, sd 2500 ft. Wooten et al's Moore-Martin 1, 9-13-20, sd 1225 ft.

OUACHITA COUNTY—Amerada Pet. Co.'s Lester Mill Co. 1, 9-13-19, dr 1395 ft. Jimmie Cox's Burton 2, 30-15-17, sd 2190 ft. Eck & Boger's Criner 1, 21-15-19, dk. Foster et al's Harvey 1, 32-11-19, dr 1670 ft. Hopkins et al's Allen-Curry 1, 33-14-19, sd 2055 ft. Leeper et al's Wesson 1, 23-15-19, sd 2205 ft. Peltier et al's Eagle 1, 25-12-16, fsh for ds 2310 ft. Pure Oil Co.'s Moline 1, 21-11-17, dr 2425 ft. Riley et al's Henry 1, 10-11-16, fsh 2072 ft.

UNION COUNTY—Bondurant et al's Clark 1, 34-17-12, to set 4½-in 2655 ft; Turbeville 1, 9-18-12, sd 1610 ft. Garrett et al's Robinson 1, 33-18-14, dr 2675 ft. Harrell Trust's Steele 1, 11-19-12, sd 2435 ft. Hurst et al's Dumas 1, 9-17-16, rig. Jeter et al's Burnside 1, 33-17-13, dk. Ray et al's Long 1, 28-16-14, sd 2171 ft. Starke et al's Little 1, 21-19-12, sd 2281 ft. Traffic Oil Co.'s Goodwin 1, 20-16-14, dr 200 ft.

Petroleum and Its Products

High-Grade—Uniform Quality

Gasoline, Kerosene, Fuel Oil, Naphtha, Distillates

Sunshine State Oil & Refining Co.

(Incorporated)

Offices, 1019-1025 American National Bank Bldg. Wichita Falls, Texas

Tribal Osage Oil Leases

At Public Auction, March 18 and 19, 1924
By U. S. Government

March 18 and 19, 1924, at Pawhuska, Oklahoma, about 100,000 acres will be offered for oil leases in quarter section tracts. Bids will be for bonus in addition to royalties, 25% payable on day of sale, balance in 3 annual installments, with acceptable security. Within advertised area there are about 8,690 oil wells producing from 1 barrel to 5000 barrels each, the total daily production for December, 1923, being about 90,000 barrels; also, there are about 242 wells drilling. All lands are now leased separately for gas. Blue print maps of area advertised, showing tracts producing oil or gas, can be had for 50c each, also logs of producing oil or gas wells for 25c each well. Write U. S. Superintendent, Osage Agency, Pawhuska, Oklahoma, for maps, logs, or other information.

OKMULGEE ASSOCIATION ELECTS

Okmulgee, Okla., March 1.—The following were named as officers and directors of the Okmulgee District Oil and Gas Association at the annual election this week: Ed H. Moore, president; James G. Lyons, vice president; Charles I. O'Neill, secretary; W. E. Wood, J. J. Moroney, W. B. Pine, Chas. L. McMahon, E. R. Black, M. C. French, G. A. Gifford, C. S. Sands, R. W. Clark, Enoch P. Jones, J. J. Schock, C. W. Wangerien and R. D. Thompson. This organization numbers 200 members and since its organization four years ago has worked for the independent operators and the upbuilding of the Okmulgee district.

PARKERSBURG STEEL BAND WHEELS

STEEL Angle Arms, securely riveted to circles of Steel Cants and bolted to a Pareelite* Shaft Hub, provide a band wheel framework that eliminates the use of band wheel flanges.

Rows of standard wooden band wheel cants, staggered and nailed together, are bolted between the steel cant circles, and evenly compressed throughout the circumference of the wheel.

Parkersburg Steel Band Wheels are made in standard diameters, faced for standard width belting, and can be supplied to fit regular sizes of band wheel shafts.

PARKERSBURG Metal Tug Pulleys

bolted to the steel angle arms, are supplied as regular equipment.

The "V" grooves assure positive traction for the bull ropes. Like the tug rims on Parkersburg steel bull wheels, these tug pulleys are Pareelite.*

When desired, Parkersburg Metal Tug Pulleys are sold separate from the Steel Band Wheels, and can be applied to any standard Wooden Band Wheel.

*Pareelite is a "High Manganese" metal—not cast iron—that will sustain a load of 4320 lbs. on arbitration test bar of the American Society for Testing Materials, and with only 7/64th inch deflection at breaking point. It has an ultimate tensile strength of 33,680 lbs. per square inch.
In *elasticity* Pareelite approaches more nearly to cast steel than any other cast ferrous metal!

Ask our nearest representative for further detailed information—or write us direct

The PARKERSBURG RIG & REEL CO.

Main Office and Works, Parkersburg, W. Va. ***New York Office,*** 30 Church St., Room 1510

California Representatives, BUCK & STODDARD
485 California St., San Francisco, Calif.; Box 720, Arcade Station, Los Angeles, Calif.

District Offices and Distributing Warehouses from which Parkersburg Service is available

TEXAS
*Houston
Breckenridge
Corsicana
Graham
Iowa Park
Mexia
Orange
Ranger

WYOMING
*Casper
‡Rawlins

LOUISIANA
*Shreveport
Haynesville

KANSAS
*Eldorado
Madison

W. VIRGINIA
Parkersburg
Clarksburg

OKLAHOMA
*Tulsa
Bristow
Drumright
Henryetta
Hominy
Okmulgee
Wetumka
Tonkawa
Wilson
Shidler

ARKANSAS
*El Dorado
Smackover
McNeil

MONTANA
Sunburst
†Winnett

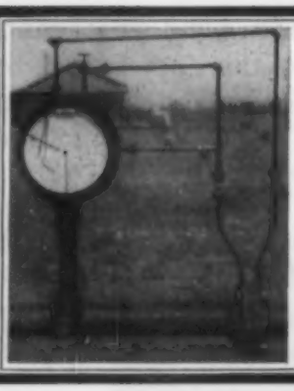
*District Offices ‡Frick-Reid Supply Co. †Continental Supply Co.

Oil Drillers' Supplies
Plus Real Service

We can supply oil field operators with every piece of their equipment; complete rigs—casing—pumping equipment.

Send us your orders or write today for catalog, prices and information. We will give you "right now" service.

ALAMO IRON WORKS
SAN ANTONIO, TEXAS.



Foxboro Orifice Meter

A rugged, accurate Orifice Meter for measuring Casinghead Gas, Natural Gas, Air, Oil, Steam, Gasoline and Water. Write for Bulletin N-113-1.

THE FOXBORO CO., Inc.
Foxboro, Mass., U. S. A.
213 S. Cincinnati Ave. Tulsa, Okla.

FOXBORO
REG. U. S. PAT. OFF.
THE COMPASS OF INDUSTRY

PIPE FOR SALE

25,000 feet 4-inch Used Line Pipe
10,000 feet 6-inch Used Line Pipe
25,000 feet 8-inch Used Line Pipe
6 Sets 6-inch Used Ideal Rig Irons.
For immediate shipment from our Texas yards.

Keystone Pipe & Supply Company
314-315 W. T. Waggoner Bldg. Phone Lamar 3640, FORT WORTH, TEXAS
Branch Stores: Wichita Falls, Graham, Breckenridge.

Tret-O-litE
(Reg. U. S. Pat. Office)

PROCESS PATENTED. The Barnickel processes for treatment of cut oil and other petroleum emulsions by the use of chemical agents are protected by valid process patents issued by the United States and foreign countries.

The purchaser of TRET-O-LITE is licensed to practice the Barnickel processes to the extent permitted by the quantity of TRET-O-LITE purchased. He is not licensed to use any other chemical covered by the Barnickel patents, either alone or with TRET-O-LITE.

WM. S. BARNICKEL & CO.
ST. LOUIS, MO.

PETROLEUM SUPPLY COMPANY
DISTRIBUTORS
South Chester Oil Country Tubular Goods
Darling Gate Valves
"OCB" Tool Joints Roark Standing Valves
Petroleum Plunger Pumps McKemie Working Barrels

"GULFCO" PRODUCTS

STOCKS: HOUSTON MEXIA SHREVEPORT
EL DORADO NORPHLET SMACKOVER

Oklahoma Wildcats

ALFALFA COUNTY—McGinnis & Ward's Watts 1, C NE SW SE 21-27-10w, dr 1890 ft. Armstrong, Henley & Piffiers' Turnmull 1, C NW SE NW 23-24-11w, sd 50 ft.

ATOKA COUNTY—McPhearson et al's Wild 1, SWc NW 7-2-9, dr 3610 ft. Hanson et al's Dabney 1, C SE NW 17-4-11, sd 100 ft. J. F. Torrence et al's Fee 1, SWc NE 1-2-9, sd 1350 ft. Wapanucka Dev. Co.'s Underwood 1, C W L SE SE 28-2-9, sd 1700 ft.

BECKHAM COUNTY—Bollion Oil Co.'s Green 1, SW SW 34-10-24w, sd 1360 ft. Ship-Nash et al's No. 1, SEc NW 35-9-25w, pb to 2382 ft. J. A. Pringle's Burkholder 1, C NE NE 6-9-24w, sd 3110 ft. Burlingame & Dovel's Dugger 1, SEc NW NW 35-10-23w, sd 525 ft.

BLAINE COUNTY—Okomo Oil Co.'s Edlemaier 1, SWc 21-15-10w, dr 625 ft. Thompson et al's Dickerman 1, C SE SE SE 26-15-12w, sd 3213 ft. Meyers et al's Chronister 1, SEc NW NE 17-18-16w, sd 965 ft.

BRYAN COUNTY—Lyon et al's Coombs 1, SEc SW NW NE 11-8-9, rig. Berlieu et al's Ramsey 1, NWc NE NE 32-7-8, sd 2475 ft.

CLEVELAND COUNTY—Garr Oil Co.'s Holland 1, NEc SE 31-10-4, sd 2620 ft.

CUSTER COUNTY—Hoover Oil Co.'s No. 1, NWc SE 34-13-14, sd 2510 ft.

COAL COUNTY—Basie Oil Co.'s Heck 1, SEc 18-2-9, rig. Bearman et al's Payte 1, SWc NW NE 32-2-9, sd 2780 ft. Guy Vaughn's Downard 1, NWc SW 16-2-10, sd 2565 ft; Nichols 1, SWc 1-1-11, rig. McPhearson et al's Jamison 1, NWc NE NE SW 24-1-8, sd 300 ft.

GRANT COUNTY—Ossenbeck et al's Hoffman 1, SEc 23-29-3w, sd 3285 ft. Embry et al's Edwards 1, C SE SE NW 20-26-4w, rig. Day Oil Co.'s Vandatta 1, SWc NW 8-26-2w, sd 1270 ft.

GREER COUNTY—Western Nat'l Gas Co.'s De Armond 1, NWc SW 23-7-23, sd 2015 ft.

HARMON COUNTY—Keyes Pet. Co.'s 1, NWc SW 21-2-23, sd 2925 ft.

HUGHES COUNTY—Flesher Pet. Co.'s Smith 1, NWc NE NW 8-9-12, sd 3530 ft. W. J. Thurber's Foster 1, SEc SW SE 5-7-8, sd 3265 ft. Paraffin Oil Co.'s Love 1, NEc SE NE 13-7-12, dr 3480 ft. Middle States Oil Co.'s Arn 1, NWc 13-6-11, sd 3585 ft.

JACKSON COUNTY—Douglas Oil Co.'s Jackson 1, NWc SW SE 20-3-20, sd 3440 ft. J. D. Wade's No. 1, C SW NW 36-2-23, fsh 2012 ft.

JEFFERSON COUNTY — Magnolia Pet. Co.'s Peck 1, C NE SW NW 4-3-6w, dr 3612 ft. Gant et al's Skelton 1, C NE NE NW 22-3-6w, dr 2450 ft. Shawver et al's Anderson 1, SEc NE 31-4-8w, co 1050 ft. J. C. Cook Oil Co.'s Gibson 1, C NW NW NW 36-5-8w, dr 1770 ft.

KAY COUNTY—Ostot Dev. Co.'s Rohoe 2, C NW NW SE 3-27-1, dr 2515 ft. Alcorn Oil Co.'s Mills 1, C NW SE 24-26-1, dr 2643 ft; Hadley 1, NEc 2-26-2, r 720 ft. Amerada Pet. Co.'s Elledge 1, NEc SE 32-27-1, dr 3906 ft. Guyles & Daniels' Chism 1, SEc NW 32-29-2, sd 2060 ft. Mid-State Pet. Co.'s Cardin 1, SWc SE 8-28-2, sd 3517 ft.

KIOWA COUNTY—Conner et al's No. 2, NEc NW NW 34-7-16, dr 1408 ft.

LINCOLN COUNTY—Sun Ray Oil Co.'s Gallagher 1, C N L SE SE 18-13-5, dr 2360 ft. Flynn & Morgan's Baker 1, SEc 2-1-5, r 1110 ft. Magnolia Pet. Co.'s Wilson 1, SWc SE NW 18-1-5, dr 2565 ft. H. F. Wilcox O. & G. Co.'s Smulian 1, NWc SE NW 2-13-6, dr 1910 ft.

LOGAN COUNTY—Buford-Brim Oil Co.'s Newman 1, NWc NE 32-19-3w, sd 2480 ft. Frank P. Kelly et al's McDaniels 1, NEc 28-13-5w, lcn. Okla. Drlg. Co.'s Johnson 1, SEc SW 36-15-2w, sd 1716 ft. Franklin Oil Assn.'s Moore 1, NWc SE SE 28-18-4w, dr 925 ft.

MARSHALL COUNTY — Magnolia Pet. Co.'s Everett 1, C NE NE SE 36-7-5, dr 3290 ft. Van Vleck's Chaffin 1, C SE NW NW

OIL FIELD EQUIPMENT

OIL WELL CASING

Complete line of used casing and line pipe. We handle only first class material and guarantee every joint to give satisfaction. Large stock of used cable tools, boilers, engines, etc.

OIL FIELD SALVAGE CO.
GRAHAM, TEXAS

PIPE, MACHINERY & OIL WELL SUPPLIES

Complete line of new and used pipe, complete Rotary Drilling Rigs, at attractive prices. Mill shipments promptly filled. See us before you buy.

TEXAS PIPE & SUPPLY CO.
1706-20 Maury Street Houston, Texas
Phones, Preston 1592-5411

C. H. Smith, Pres. and Treas.
Mrs. J. B. Moore, Vice-Pres.
A. L. Eastham, Sec.

Beaumont Well Works Co.
Oil, Gas and Water Well Supplies
Cor. Laurel and Magnolia
Beaumont Texas

HOUSTON OIL FIELD MATERIAL CO.
PIPE, BOILERS, ENGINES
All Kinds of Equipment,
New and Used
West Bldg. Houston, Texas

"First Exclusive Iron Dealers in Texas"

F. W. HEITMANN COMPANY

113 Main St., Houston, Texas

Gardner Steam Pumps
National Pipe, Boiler Tubes
Fittings, Valves, Packings
Beltings, Wire Rope
Drilling Cables, Bull Ropes

We carry a complete stock of the above commodities at all times and can ship immediately

"TEXAS SPECIAL" PORTABLE ROTARY RIGS

Gasoline engine, Power pump and complete Draw Works ALL ON WHEELS. Drills 2500 ft. for $1.50 per ft. Write for details and letters from satisfied owners.

OIL WELL SERVICE COMPANY
1414 Elysian St. Houston, Texas

27-5-4, dr 2800 ft. Lane & Watson's Sacra 1, C NW SE NE 10-5-5, sd 1550 ft.

LOVE COUNTY—Wickenheiser et al's Beal 1, NEc SE NW 13-5-3, sd 2465 ft. Drillers Syndicate Oil Co.'s Wilson 1, NWc NE 11-7-8, sd 2830 ft.

McCLAIN COUNTY—Day Oil Co.'s Ball 1, SEc NW NE NE 9-5-3, dr 2390 ft.

McCURTIN COUNTY—Fred Ptak's Wilson 1, NWc SE 15-8-25, sd 2700 ft.

OKLAHOMA COUNTY—W. R. Ramsey's Hendricks 1, SEc 8-12-1, Firestone Oil Co.'s School 1, NWc SE 36-11-3, sd 3470 ft. Big Three Oil Co.'s Wild 1, SWc NE 31-12-2, rig down 1390 ft.

PAYNE COUNTY—Dan Bunnell's Overhole 1, NEc 9-18-3, dr 3250 ft.

PITTSBURGH COUNTY — Paraffin Oil Co.'s Pratt 1, NWc SE NE 13-7-12, dr 1076, Ed Richards' Townsend 1, C NE NE 29-6-13, sd 185 ft.

PONTOTOC COUNTY—Harper et al's Dener 1, NWc SE SE 19-5-7, sd 800 ft. Smith et al's Norris 1, SWc SE 34-4-6, fsh 2430 ft.

POTTAWATOMIE COUNTY—Ossie Oil Co.'s Howell 1, SWc NE 13-10-2, r 2595 ft. Magnolia Pet. Co.'s Bredenburg 1, C SE NW 18-7-5, dr 2913 ft. Davey Detrick's McGahey 1, 10-6-2, set 8-in 2875 ft. H. G. Guinnup's Floyd 1, SWc SE 13-11-3, dr 2520 ft. North American Oil Co.'s Madgett 1, NWc 25-10-4, dr 340 ft. Maud Oil Products Co.'s Yinson 1, NEc NW 18-7-5, rig.

ROGER MILLS COUNTY—Kellog Oil Co.'s Dr. Seba 1, C E L NE NE 10-16-21w, dr 3528 ft. Twin Hills Oil Co.'s McClure 1, NWc 15-15-26w, sd 2370 ft. Colorado Oil Co.'s No. 1, C NW NW NW 32-16-22w, sd 1850 ft.

SEMINOLE COUNTY—Ossenbeck et al's Davis 1, C SW NE 10-8-7, fsh 3340 ft. Wm. McDougall's Belle Dindy 1, C SW SW 20-6-7, dr 1890 ft. Maxwell et al's Carty 1, C NE NW 36-6-6, dr 550 ft. Link Oil Co.'s Carolina 1, C SE NW 14-6-7, sd 1820 ft.

TILLMAN COUNTY—Luffborough et al's Finley 1, SWc NE NW 23-2-17w, dr 3170 ft. Marshall Bros.' Riverbed 1, SWc NE NE 8-5-14w, co 1524 ft. A. V. Burton's Lawrence 1, NWc NE 28-3-14w.

WASHITA COUNTY—R. B. Hartman's Montgomery 1, NEc SW SE 23-9-17w, set 8-in 3060 ft. Santrock Bros.' No. 1, SWc NE 20-8-16w, sd 2905 ft. McCoy et al's Pratters 1, C SW SW NE 9-8-15w, dr 880 ft.

Kansas Wildcats

BARBER COUNTY—R. B. Brown's No. 1, NWc SW NW NW 33-30-14, dr 3175 ft.

BARTON COUNTY—Cheyenne Oil Co.'s Sooy 1, SWc SW 27-18-12, fsh 3525 ft. McMinn et al's Baker 1, SWc 5-18-13, sd 760 ft. Haynes et al's No. 1, SWc SW 31-18-12, dr 370 ft. H. W. Neiswanger's Everleigh 1, SW SE 1-18-12, lcn; Weiker 1, SW SE 2-19-12, sd 700 ft. Mountain States Oil & Gas Co.'s No. 1, SEc NE 22-18-13, sd 2650 ft.

COFFEE COUNTY—Sunbeam Pet. Co.'s Andrews 1, NWc NE 33-20-15, rig. Thad O'Day's Allen 1, NWc SE 13-21-15, sd 900 ft. Pryor & Lockhart's Butler 1, NWc SW SW 1-21-13, fsh 1770 ft.

FINNEY COUNTY—Garden City O. & G. Co.'s Wann 1, SEc SE 36-21-30, sd 2890 ft.

GEARY COUNTY—Liberty Texas Oil Co.'s Wright 1, NEc NE 4-12-6, sd 750 ft; Foster 1, NEc SW 30-16-6, sd 2000 ft.

JEFFERSON COUNTY—Northern Counties' Edwards 1, SEc NW NW 13-9-19, fsh 3400 ft.

KINGMAN COUNTY—Hale et al's Garner 1, SWc NW 34-27-1, sd 2543 ft.

OSBORNE COUNTY—Liggett et al's Worley 1, NWc NW 34-10-15w, rig. Delhi Oil Co.'s Forman 1, SWc SW 20-10-11w, sd 3250 ft.

OSAGE COUNTY—Sharpless & Stark's Kirklen 1, SEc NW 36-17-14, lcn. Rodgers & Bittle's Bertha 1, SEc NW 28-17-15, lcn. Mul-Vit Dev. Co.'s Neil 1, NEc NW SW NE 8-17-17, sd 2735 ft. Rogers & Brown's No. 1, NEc SW 15-16-16, sd 1500 ft. Foster Oil Co.'s No. 1, NEc SW 8-16-17, top lime 1470 ft sd. Mayer et al's Williams 1, NEc SW NW 12-18-14, rig.

POTTAWATOMIE COUNTY — Crawford et al's Stewart 1, C E L SE SE SE 17-9-12, rig; Greischabert 1, SWc SE SW SW 31-9-12, rig; St. Mary's 1, SWc 11-1-12, sd 2290 ft.

RENO COUNTY—Haynes et al's O'Halloran 1, NWc SE NW 28-25-8, sd 2610 ft. Travis et al's No. 1, NE SW 5-22-4w, sd 1800 ft.

RICE COUNTY—Hipple & Child's No. 1, SE NW 35-20-6w, pulling 5-in 3365 ft, show oil. H. T. Proctor's Taylor 1, NWc 15-21-10w, lcn.

RILEY COUNTY—Richie et al's Boyle 1, SEc 36-7-4, sd 2601 ft. Walton Oil Co.'s Thierer 1, NWc 20-10-12, sd 1600 ft. Pawnee Oil & Gas Co.'s Marks 1, SWc NE NW 26-10-6, sd 1700 ft.

RUSSELL COUNTY—Valerius Oil Co.'s Munsell 1, NWc NE 17-12-15w, rig; Phillips 1, SWc 3-13-13w, rig; Oswalt 2, SEc SW 8-12-15w, lcn. Merriam & Findeis' Milke 1, SWc SE SW 20-12-15w, lcn. Patton et al's Walbridge 1, SWc NE 4-13-15w, r 360 ft.

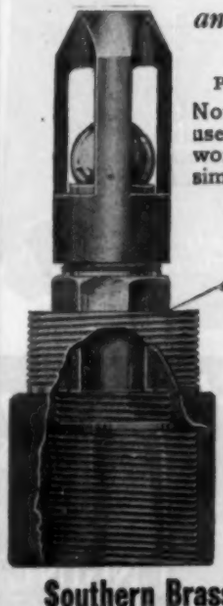
SEWARD COUNTY—C. T. Development Co.'s Wood 1, NWc SE 34-34-34, sd 700 ft.

PIPE, VALVES AND FITTINGS

Due to our large stock on hand, in Pipe, Valves and Fittings, Standard and Extra Heavy, Flanged and Screwed, from ⅛" to 24" in diameter, we are offering attractive prices for immediate shipment.
Pipe out and frabricated to specifications.
Arrangement for extended credit can be made.

Commonwealth Pipe & Supply Company, Inc.
Dist. Sales Dept. P. O. Box 5081, Boston, Mass.

Adams Combination Cuff and Standing Valve
Patent No. 1353303



Not necessary to use special cuff on working barrel—simply take a top cuff off of any old barrel and substitute for bottom cuff, then screw hydraulic valve in place.

Made of bronze with steel crown ball and seat.

Has a salvage value
Sizes 1¼, 2¼, 2¾, 3¾ inches

Manufactured only by

Southern Brass Mfg. Co.
HOUSTON, U. S. A.

ACREAGE AND PRODUCTION FOR SALE OR WANTED

Announcing New Sectionized Texas County Maps, Scale 1 inch-1 mile
White Prints Cloth $5.00, paper $3.00
Humble, Gulf, Texas, Mid-Kansas, Prairie, Pure, Sinclair and Cosden Companies use our maps.
Every County in Texas
Orders in mail one hour after receipt of wire
TEXAS PETROLEUM BUREAU,
P. O. Drawer 586 Ft. Worth, Texas

F. W. Freeborn
Engineering Corporation
Engineers, Appraisers, Constructors, Managers
For
Oil and Industrial Properties
Valuations for Income Tax, Reorganization, Refinancing and Mergers
General Offices: Tulsa, Oklahoma
Branch Offices: New York, Dallas, Boston

BAKER
CASING SHOE CO.
Box 264 "C" Huntington Park Sta.
LOS ANGELES, CALIF., and
Box 239 -C COALINGA, CALIF.
MANUFACTURERS AND DEALERS
Oil Well Specialties
for Advanced Methods
Practical and Dependable

BAKER
Anchor Wall Packers
Baker Casing Shoes
Bridge Builders
Cement Retainers
Cement Plugs
Clean-Out Bailers
Dump Bailers
Die Nipples | Water
Die Collars | Tight
Gas Traps
Hinged Spiders
Heaving Plugs
Pitman Ends
Plain Casing Shoes
Regular Hook Wall Packers
Release Hook Wall Packers
Rotary Bits Baker Type
Rotary Hole Guides
Rotary Shoes
Rotary Tool Joints
Rotary Wall Hooks
Split Shoe Guides
All Supply Houses or Direct

Sewart O. & G. Co.'s Seeley 1, NEc NW 20-33-33, sd 2427 ft, show oil and gas. Traders O. & G. Co.'s Bunting 1, SWc NE SW SW 4-25-34, rig burned 1600 ft.

SUMNER COUNTY—Jack Robinson's Barker 1, NWc 2-31-1, lcn. Collins & Frantz's Young 1, SEc NE 33-33-2, dr 1287 ft. Collins, Claud & Nelson's Dillon 1, NEc 34-34-1 rig.

TREGO COUNTY—Morton et al's Kyser 1, C E½ 9-11-22, r 1406 ft. Keyes Pet. Co.'s Walsh 1, NWc SE 5-11-25, sd 1700 ft; Walsh 2, SWc NE SW 5-11-25, sd 1550 ft.

WASHINGTON COUNTY—Barnes Oil & Gas Co.'s Wickham 1, SEc SW 9-5-5, sd 1305 ft.

WOODSON COUNTY—Equity Oil Co.'s Solomon 1, SWc NE NW 30-26-17, sd 2960 ft. Haglett et al's Hines 1, C NE NE NE 30-25-16, fsh 1340 ft; Rash 1, NWc NE 5-25-16, sd 350 ft.

Throckmorton Gasser Being Used for Fuel

Fort Worth, Texas, March 4.—Throckmorton County's first completed gas well along with a 40-acre lease has been sold by Monroe Production Company and associates to the Southwestern Gas, Light and Power Company for a consideration reported at $5000, and the new owners are building about 12 miles of 2-inch line to sell the gas production to drilling wildcat tests in the western part of Young County. This gasser is the first for the county, and came in last January making about 8,000,000 cubic feet from sand at 844 to 849 feet. It is on the R. S. Ray lease, section 2362, T. E. & L. Co. survey, in the east half of the county.

Nothing Results to Junk in Acid Bath

Wichita Falls, Texas, March 3.—Use of acid by the Nebraska-Texas Oil and Gas Company to dissolve iron junk at the bottom of its deep wildcat test on the W. H. Meyers ranch, northwest corner of the C. Thompson survey in Southeastern Clay County, did not afford any noticeable results, according to John W. Koutsky, president. The junk in the hole consisted of a drill stem, cable and other metal objects, and the test was standing with hole full of water at depth of 3285 feet when 10 gallons of acid was lowered to the top of the obstruction with a two-inch bailer and dumped. After standing several months, fishing tools were put into use with success, and the recovery of the junk revealed that no chemical action was visible on any of the objects, probably because of the presence of water.

TEXAS OIL MAPS
County and District
Catalog on Application
HEYDRICK MAPPING COMPANY,
Wichita Falls, Texas

The FT. WORTH LABORATORIES

Field Gas Testing. Analysis of oil field brines, gas minerals and oil.
Sell Thermometers, Hydrometers and Laboratory Glassware
F. B. Porter, B. S., Ch. E., Pres.
R. H. Fash, B. S., Vice President.
828½ Monroe St., Ft. Worth, Texas

Many Producers Ruined by Drilling Into Water Sand

Washington, D. C.—In an attempt to obtain greater production, oil well operators have ruined many good wells by drilling through an oil sand and into water, state T. E. Swigart and C. E. Beecher, petroleum engineers, Department of the Interior, who have recently made a study of water problems in oil and gas fields, for the Bureau of Mines. When there is danger of drilling into water in the base of a sand or into a separate water sand below but near the oil sand, an operator can better afford to stop drilling before the water is reached and have a relatively small well than to continue drilling until the water sand is penetrated and then be confronted with the wastes that such a condition may entail. Deep water sands often carry water under high head. If an oil well is drilled into water in the base of a sand, the water may form a "cone" as the well is operated that eventually will shut out the oil. Water coning may occur when a well is drilled only a short distance into an oil sand, if bottom water is present and the well is produced too rapidly.

Perhaps one of the most familiar examples of the damage to oil fields from failure to protect oil sands properly is the Kern River field, California. The yield of oil was so low and the production of water so high that operators were finding it unprofitable to operate their wells longer. An engineering investigation was made which later served as a basis of repair work. Repairs at one well increased the production of several nearby wells from 25 barrels to 59 barrels per day and reduced the amount of water lifted from 15,927 barrels to 240 barrels per day. If work in shutting out water had not been done, parts of this field would have had to be abandoned before all the recoverable oil was obtained.

GEOLOGICAL MAPS
TEXAS
ARKANSAS
NEW MEXICO
OKLAHOMA
BLUE PRINTING-PHOTOSTATS
COUNTY MAPS-ROAD MAPS
WRITE FOR CATALOGUE
Standard BLUE PRINT MAP AND ENGINEERING CO.
515 MAIN ST. FORT WORTH, TEXAS
614 SO. SPRING ST. LOS ANGELES, CALIF.
OIL FIELD MAPS
TEXAS
ARKANSAS
LOUISIANA
OKLAHOMA
CALIFORNIA
SPECIAL DRAFTING

SOUTHERN ENGINEERING SUPPLY CO., Inc.,
Blue Printing Photostats
Engineering and Drafting Supplies
We specialize in map printing
90½ Main St., Houston, Texas
Phone Preston 6780

RECOGNIZED PETROLEUM GEOLOGISTS

William H. Foster W. A. Reiter
FOSTER & REITER
CONSULTING GEOLOGISTS
19th Floor, Magnolia Bldg., Dallas
Atlas Life Bldg., Tulsa

Income Tax Service Oil Appraisals
The Jas. I. Tucker Co.
Consulting and Appraisal Engineers
Tradesmen's Bank Building
Oklahoma City, Okla.

ERICH F. KUEHNLE
Petroleum Technologist Rodgers Building
Geological Surveys, Supervision of Field Operations, Chemical Petroleum Analyses, Engineering and Statistical Services
Houston, Texas, U. S. A.
Phone Preston 5567. P. O. Box 331

ALEXANDER DEUSSEN
CONSULTING GEOLOGIST
Reports—Appraisals—Management
Texas and Louisiana Oil Properties
1105-6 State Nat'l Bank Bldg., Houston Tex.

DEWITT T. RING
Petroleum Geologist
El Dorado, Ark.
905 Electric Bldg. Buffalo, N. Y.

GEO. C. MATSON
Petroleum Geologist and Engineer
Geological Surveys
Appraisals for Taxation or Financing
Phones Osage 2049-1833
408 Cosden Bldg. Tulsa, Okla.

EUGENE COSTE & CO.
Petroleum Engineers and Geologists
DALLAS, TEXAS
Dallas County State Bank Building

SAMUEL J. CAUDILL
Geologist & Petroleum Engineer
Valuation—Depletion
For Financial or
Income Tax Purposes
1016 Atlas Life Bldg. Tulsa, Okla.

ALFRED C. BIERMAN
Geologist and Engineer. Geological Investigations. Appraisals—Depletion. Telephone X-3641. 311 Southland Life Insurance Bldg., Dallas, Texas. Associated with Clarence B. Osborne, 402 Security Bldg., Los Angeles, California.

TANK TABLES
L. M. HALL
Tank Gauging Engineer
P. O. Box 1495
FORT WORTH, TEXAS
Accommodating Reliable

Oklahoma Engineers To Meet March 21-22

Tulsa, Okla., Feb. 28. — Engineers from most of the larger oil companies in Oklahoma and visiting engineers from other states in the Mid-Continent are expected to attend the annual meeting of the Oklahoma division of the American Association of Engineers to be held in Tulsa, March 21-22.

Probable speakers will include James H. Gardner of Tulsa, president of the Gardner Petroleum Company; D. E. Buchanan of Tulsa, vice president of Chestnut and Smith Corporation and president of the Association of Natural Gasoline Manufacturers, and others.

The Oklahoma division is divided into three sections with central offices at Oklahoma City, Tulsa and Muskogee. Victor H. Cochrane is president of the state division while W. H. Moore heads the Oklahoma City section, C. D. Watson of the Carter Oil Company the Tulsa section and S. M. McManus the Muskogee section.

Czechoslovakia Open To Foreign Interests

Washington, D. C.—The Czechoslovakian parliament now has before it legislation providing for the relaxation of the present government monopoly on prospecting and extracting crude petroleum and other mineral products, advices just received in Washington state, in order to permit private enterprise to undertake operations in this field. The government apparently has more particularly in mind prospecting for oil, the reports state. It has been reported recently that the government is in negotiation with a group of foreign interests relative to oil prospecting rights in Sub-Carpathian Ruthenia, in the eastern part of Czechoslovakia.

Permit Applications Show Large Increase

Washington, D. C.—A large increase in the number of applications for oil and gas prospecting permits and leases is reported for January by the General Land Office of the Interior Department.

The number of applications received during the month was 437, as compared with 299 in December. During the month new permits were issued in 435 cases; 253 applications were finally rejected and 318 were rejected subject to the right of appeal; 36 assignments of rights under permits were acted upon and 664 applications for extension of time for drilling operations were disposed of.

L. H. OWEN
Consulting Engineer and Geologist
WORTH BLDG.
Phone Lamar 7964
FORT WORTH, TEXAS

Oil Appraisals Management Tax Service
C. N. BLACK
Petroleum Engineer
Texas Oil Properties
406 Stewart Bldg. Houston, Texas

PATENTS
Patents Obtained and Trade Marks and Copyrights Registered
428-29-30 Bankers Mortgage Building
HARDWAY & CATHEY
Phone Preston 4790 Houston, Texas

Maurice Hirsch & Allen Hannay
ATTORNEYS AT LAW
601-2-3 Goggan Bldg
HOUSTON, TEXAS
Specializing in Oil Law and Land Law

PATENTS
Patents Obtained, Trade Marks, Patent Causes
JESSE R. STONE
Formerly Assistant Examiner United States Patent Office
Andrews, Streetman, Logue and Mobley
12th Floor Union N. Bk., Houston, Texas

F. N. WILLIAMS
PETROLEUM ENGINEER
Specializing in Design, Construction, Operation and Management of Refineries, Investigation and valuation. Reconstruction of refineries to meet modern conditions.
2213 Park St., Beaumont, Texas

EDWIN B. HOPKINS
CONSULTING GEOLOGIST
25 Broadway
NEW YORK

VINSON, ELKINS & WOOD
ATTORNEYS
Gulf Building, Houston, Texas
Special Attention to Oil Leases and Litigation

DAVID DONOGHUE
Geologist and Engineer
Appraisals and Geological Reports
West Building, Houston, Texas

Manufacturer and Supply Dealer Notes

St. Louis Company Gets South Texas Representative

Houston, Texas, March 8.—Announcement has recently been made by the Heine Boiler Company, St. Louis, of a Texas representative.

The Tennant Company with offices in the Union National Bank Building, Houston, will represent the Heine Company in a new territorial division comprising the entire southern half of the State of Texas.

J. A. Tennant is in charge of the Texas office.

Smith and Whitney of Dallas, Texas, will continue to represent the Heine Company in the northern half of Texas.

Appointment Announced By the Wilson Company

Houston, Texas, March 8.—Wilson Oil Tools Corporation announces the appointment of H. F. Emanuel as district representative with headquarters in Houston. Mr. Emanuel has formerly been employed by the Humble Oil and Refining Company.

Earl Hagy, former manager of the Houston office, goes to Fort Worth to have charge of the district office in that city.

New Book Discusses Income Tax Accounting Principles

Of interest to executives of oil companies is a book just off the press, "Accounting Principles Underlying Federal Income Taxes 1924," by Eric L. Kohler, M. A., C. P. A.

Many books have been written from the legal or reference point of view on federal income taxes, but this work makes clear the principles of accounting underlying them. The author goes right to the very heart of income tax accounting. Each ruling and decision is carefully examined, clearly interpreted and critically discussed. Step by step the book shows exactly how to prepare each item of the return. What method of accounting to use, the procedure and form to follow if a change is made in the accounting method for the period of the fiscal year are explained. Rules are given that distinguish clearly between capital and revenue expenditures. In short, just how to apportion properly all disbursements in making income tax returns for year 1924.

This book may be secured from The Gulf Publishing Company, P. O. Box 1307, Houston, Texas.

C. B. KENNEDY

Ohio Steel Foundries to Have Mid-Continent Office

St. Louis, Mo., March 8.—The Ohio Steel Foundries Company will be represented in the Mid-Continent field by C. B. Kennedy. He will have offices at 2024 Railway Exchange Building, St. Louis.

For ten years Mr. Kennedy was district manager and engineer for the Brown Instrument Company of Philadelphia. During this time he was closely associated with the Doctors Cross of the Kansas City Testing Laboratory, and P. C. Dubbs of the Universal Oil Products, in the development of the Cross and the Dubbs cracking process. Mr. Kennedy's work was temperature and pressure control and he worked out a number of special instruments and controls for refinery practice.

During the year 1923 he was employed by the Gasoline Products Corporation in connection with the sale of Cross Cracking Process.

Oil Conservation Company Adds New Representative

Cleveland, Ohio, March 6.—In order to provide for expanding business, the Oil Conservation Engineering Company has moved from its former location to the O-S Building.

This company announces the addition of James O'Conner to its Casper, Wyoming, office force.

Mr. O'Conner has had extensive experience in tank building and will devote his time to the perfection of fire-prevention and evaporation prevention equipment.

EVERYTHING

FOR THE OIL WELL

Operators in the oil fields in this territory have found that the many facilities we maintain assure them at all times

A DEPENDABLE SOURCE OF SUPPLY

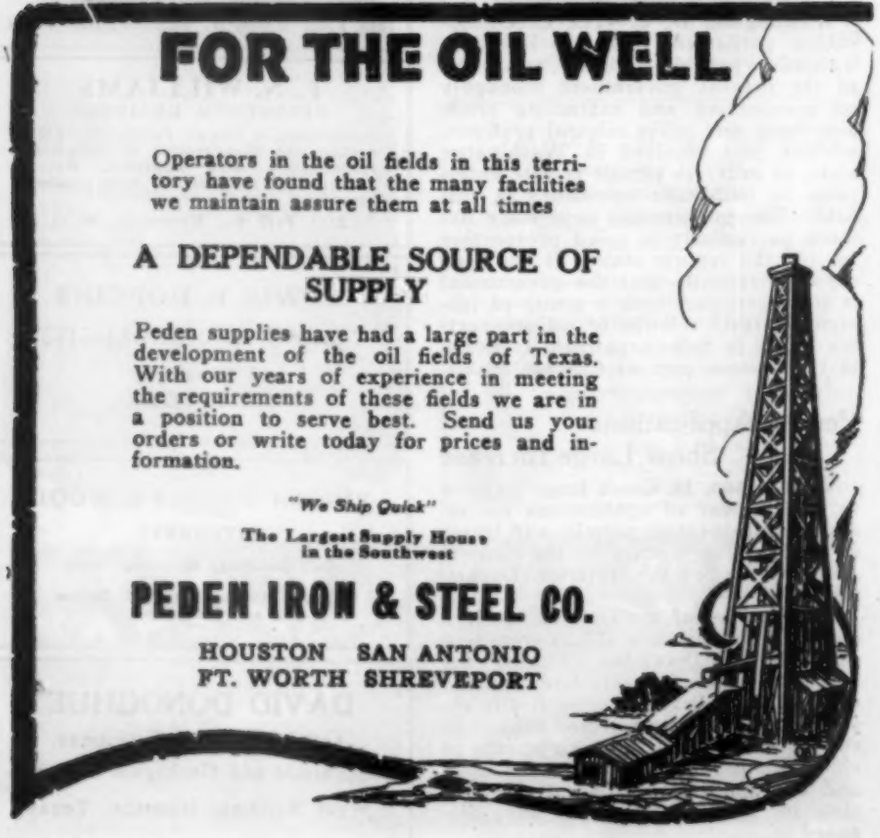
Peden supplies have had a large part in the development of the oil fields of Texas. With our years of experience in meeting the requirements of these fields we are in a position to serve best. Send us your orders or write today for prices and information.

"We Ship Quick"

The Largest Supply House in the Southwest

PEDEN IRON & STEEL CO.

HOUSTON SAN ANTONIO
FT. WORTH SHREVEPORT



Gulf Refining Company

OKLAHOMA
TEXAS
LOUISIANA

Refiners of PETROLEUM

GASOLINE
REFINED OIL
NAPHTHA
GAS OILS
PARAFFINE WAX
ASPHALT
FUEL OIL
LUBRICATING OILS
CYLINDER
ENGINE
CORDAGE

Red and Pale Paraffine Oils

General Sales Offices: PITTSBURGH, PA.

District Sales Offices:
NEW YORK, HOUSTON, ATLANTA, BOSTON, NEW ORLEANS
PHILADELPHIA

Ocean Terminals

Beverly, Mass.
Gibson's Point, Pa.
Port Tampa, Fla.
Port Arthur, Texas

Bayonne, N. J.
Savannah, Ga.
Gretna, La.
Magazine Point (Mobile), Ala.

Providence, R. I.
Jacksonville, Fla.
Galveston, Texas

DUNN TONGS

10 Year Tongs

Type "CX"

The rapidly increasing demand for Dunn Tongs throughout the oil fields of the world speaks volumes for the recognition accorded them by the entire industry.

Dunn Tongs are sold strictly on their merits—their ability to speed the work of the driller safely. Repeat orders attest the fact that they do what is expected of them.

Carried in stock by

The National Supply Companies

Say you saw it in The Oil Weekly

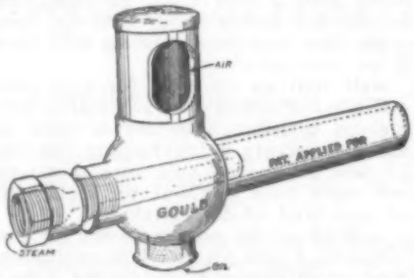
NEW EQUIPMENT, CATALOGS, BULLETINS, BOOKS

New Oil Burner for Field Boilers Found Successful

Operators will be interested in a new oil burner being put on the market by the Gould Burner Company, Shreveport, Louisiana.

This burner is called the Gould Burner. The burner has been found to give satisfactory service in actual operation.

The rush of live steam through the burner creates a vacuum in the large central chamber. This vacuum draws in air from one side and oil from the



other. The air and the oil unite with a swirling motion and are sucked into the live steam and shot from the burner perfectly vaporized.

Ignition takes place within from two to six inches of the nozzle of the burner.

The clear blaze and intense heat from the burner tend to keep the boiler flues clean and thus lengthen the life of the boiler.

It is claimed that one Gould burner will fire a seventy horsepower boiler of the type ordinarily used with a drilling rig.

Conservation of Petroleum Products Urged by New Book

The book, "Oildom, its Treasures and Tragedies," by O. H. Reinholt, is just off the press. The purpose of this book, as stated by the author, is to encourage the conservation of gasoline and other petroleum products and also to create a better impression in the public mind concerning the legitimate petroleum industry. It deals with the international and domestic status of the industry, the origin and geology of the natural resource, description of the major American fields, core drilling and the mechanism of well boring, oil production, pipe line transportation and refining and the economics of petroleum and the petroleum business. Written in simple, non-technical language.

This book may be secured from The Gulf Publishing Company, P. O. box 1307, Houston, Texas.

Pipe Machines Described in Bignall & Keeler Catalog

A new catalog has recently been issued by the Bignall & Keeler Machine Works, describing their pipe machines.

The Bignall & Keeler line covers pipe threading machines of all descriptions from the smallest to the largest sizes.

A special feature of these machines is the Peerless Adjusting Mechanism. The parts are simple and few in number. The general principle is used throughout all types and sizes, but the mechanism differs in a few minor details. The adjustments necessary to obtain threads of different gauges are made by turning the adjusting nut or screw (the nut on the larger machines and the screw on the smaller). The adjusting nut is yoked to the cam ring bracket, and an adjustment in either direction revolves the cam ring, expanding or contracting the dies.

Because the threads on the adjusting screw are of small pitch and the pitch of the cam is slight, an exceedingly small movement of the dies can be obtained.

Copies of this catalog may be obtained by writing the Bignall & Keeler Machine Works, Edwardsville, Illinois.

Wire Rope for Oil and Gas Wells Featured in Catalog

Wire rope is featured in a catalog recently issued by Broderick & Bascom Rope Company.

This little book is more than a catalog. It gives actual records of B. & B. wire rope that has been used on wells in different parts of the country, ranging from Montana to Mexico. Pictures are included that show the wells on which this rope was used.

The following heads are included in the catalog: B. & B. wire rope for oil and gas wells; B. & B. tapered drilling lines; B. & B. non-kinking drilling lines; B. & B. pumping lines; B. & B. sucker rod lines; B. & B. sand lines; B. & B. dead lines; galvanized strand or guy rod, and oil well cordage.

Suggestions are given for splicing wire rope.

Copies of this catalog may be secured by writing Broderick & Bascom Rope Company, 801-809 N. First Street, St. Louis, Missouri.

New Three Section Catalog Shows Bridgeport Equipment

A most complete catalog has been issued by the Bridgeport Machine Company, covering oil field equipment manufactured by that company.

For the convenience of Bridgeport patrons, the book has been arranged in three sections, viz: Swan Patented Underreamers, description and prices; Bridgeport Drilling and Fishing Tools, description and prices; Bridgeport Rental Tool Service, description and prices.

Extreme care has been taken in preparing the weight, the explanatory remarks and all other information presented in this catalog. The paper used, and the size of the illustrations have all been selected with a view to furnishing a faithful reproduction of Bridgeport products.

Copies of the catalog may be secured by writing The Bridgeport Machine Company, Wichita, Kansas.

Derrick Belt Embodies Unusual Safety Features

Field men will be interested in a new derrick belt that is to be put on the market in the near future. This belt embodies unusual safety features and is said to be a great improvement over any other safety belt yet put on the market.

One of the outstanding features of the belt is the short time required to remove it. This is perhaps the most important item in a safety belt. When working in the top of the derrick it is often necessary for the workman to make his escape in a very short time. Lives have been lost because the safety belt could not be removed quickly. This new belt can be removed instantly. It is only necessary to give the front strap a pull and the belt releases.

Another feature of this belt is its adjustability. It is made to fit snugly on any workman.

A very high quality leather is used in the manufacture of the belt. Its

strength has been thoroughly tested and is sufficient to sustain the weight of a workman under the most severe strain.

Through an error in the underline, this belt was referred to a few weeks ago as difficult to remove. Such is not the case. It has extraordinary safety features.

Further information can be secured by writing Straus-Bodenheimer Saddlery Company, 414-16 Louisiana St., Houston, Texas.

The OIL WEEKLY will print on this page data on new oilfield equipment, improvements on old equipment, news of new catalogs, bulletins, etc. This department is handled exclusively by the editorial department and has no connection with the advertising department. Data will be carried on anything which the editorial department thinks of interest to our readers, regardless of whether or not the manufacturer is an advertiser in The OIL WEEKLY.—Publisher.

LETTERS OF Paul Peebles P.S.G.

IOWA PARK, TEXAS,
MARCH 1, 1924.

PAUL PEEBLES, P. S. G.,
CARE GULF PUB. CO.,
HOUSTON, TEXAS.

UNDERSTAND THAT BEFORE YOU BECAME A GEOLOGIST YOU WERE A TEXAS COWBOY. FEEL SURE THAT CLEOPATRY WOULD BE GLAD TO SEE YOU ENTER AS A CONTESTANT AT THE CATTLEMEN'S RODEO. IF YOU COULD WIN THIS WOULD ENABLE YOU TO REPAY CLEOPATRY. WILL SAVE YOU A ROUGH RIDING HALTY HORSE PROVIDING YOU WILL ARRANGE TO HAVE CLEOPATRY COME DOWN FROM GOOSE CREEK. KNOW THAT SHE WILL BE PROUD OF YOU.

TOM L. BURNETT.

---

mi deer cleopatry,

cleo hunny I wisht yu was hear 2 advice me what 2 do. it is so menny things up for mi atenshun that I dont no what 2 do.

first off and foremost is the geologist meetin whitch I am forsed & compelled 2 be at, and then it is a meetin in chicargo 2 save the oil bizness & they all happens 2 wunst. that makes it hard for me 2 deside where I ort 2 be at. whitch is the most importanter—the oil bizness or the geology bizness? an the anser is that neether 1 wud be nuthin without the other, so yu see where I am at.

I ort 2 go 2 chicargo. it is mi dooty to the industry whitch has giv me a livin, sutch as it is, but if I go up there on the 25th & 27th I cant get back 2 huston on the 27 whitch is the geology meetin, so I hav desided 2 stay with mi own croud, an ennyway I hav not got no ralerode fair. evrybody but sinclare & doheny & me will be their, but it aint rr fare whitch is botherin them.

so hunny I am goin 2 stay in huston on account mi ole frend tom burnett is puttin on a rodeo hear & has asted me 2 help him out bi puttin on some of mi fansy ridin. he has sent me a telegram 2 say if I will ride for him, an of corse I will hav 2 do it. he says yore name in the message hunny & says for yu 2 cum up to the rodeo & see me ride. It will be a hole lot of cow punchers here then, but yu need not pay them no mine—yu can come on up & stay all the time from next wenesday when it starts till the end of the show & I will git the land lady where I stay 2 giv yu a room their if yu have got the prise & I gess tom will giv yu a pass on account of me, so it wont cost yu mutch. & then yu can stay on over for the geeology meetin 2.

hunny I gess it is a surprise 2 yu about me bein a rider, but that is a sekret I aint never tole yu, but i gess yu cud a gest it from the shape of mi legs whitch dont look like no sheep herders.

& hunny if I win the price i will be settin pritty for the exrty expents of entertainin sum of the boys what cum 2 the convenshun & then mabe if I am flush I will git there votes for pres.

let me no rite away if yu R cumin 2 the rodeo & tell everybody down their that I am goin 2 ride.

yore lovin paul.

Mr. Paul Peebles, P. S. G.,
The OIL WEEKLY,
Houston, Texas.
dear paul.

U R getting ready for the big oil smellers convenshun and I don't want to cause you any worry, but I was at Corsicana the other day and while talking to the sup of a big oil company that you refered 2 in the last issue, and some bird walked up and ask him if he was the head cheese and he said that he was. well do you need any roughnecks, and the sup ask him if he was a rough neck and the dude said, just feel it.

The sup got kind of angry for a minit but said, we need some bird in the land dept, so you see so and so, well we went back to the office in the evening, and the chief oil smeller put the fellow 2 work on the following questions answered correctly:

Q. Do you know how to find oil by the peach limb process?

A. Yes.

Q. How?

A. Well you get a forked peach limb and hold it in your two hands, and when the limb starts down, there is oil under the place where the stick points.

Q. Have you scouted, and what fields did you discover?

A. I scouted several years but was run out of town on all occasions for being too free with the wimmin. And the noted fields that I discovered are Kossee and the Dalton Fields of Texas.

Q. Do you know Paul Peebles, P. S. G., the noted geeoligist, of Houston.

A. You mean one of those little rocks in Arkansas.

Q. Yes, that is the Gentleman. How much salary do you expect, and what is your idea of an expense account?

A. Well I guess with my ability I should get $500 monthly, and to expense account, I don't smoke, but I give Navarro County Due, H——.

Start to work in the morning and report to me when you find the first still.

Now Paul we hope you are elected at the next meeting of the Oil Smellers as their President, and maybe you can get in on the next Teapot Dome, but you will have to leave Cleo out as she is too good a girl to be mixed up in scandals.

Your old side kick,
The Grand Crown Block.

deer slim

you onnery son of a gun I did not no who in the devil yu was when I gotten yore letter so I asted my teetcher whitch uster teetch me at nite skule what she thought about me payin it enny atenshun & she sed the name sined was a anonymus nomedeplume so I noed rite away it was yu an I am mitty glad 2 here from yu agin. yu do not say nuthin about how the corn is up that way but I see yu still have it on yore mine.

well slim yu see now for yore oneself what it meens 2 be akwainted with me. if a feller noes me & says so when he wants a job he gits the job, because all the oil co's noes that noin me meen yore a aNo.1 oil feeld man of sum kind of descriptshun.

well about the meetin of the oil geeologistis, I gess yu aint bothered about that as yu aint got sents enuff 2 be a geeaologist like Im, but it is goin 2 be sum moar doins down hear about then that will intrest yu, whitch is a rodio whitch ole tom burnett is puttin on in huston for the cattlemen convenshun whitch will come jest bfore the geeologistis meetin. yu no that tom noes I am 1 of the best riders what ever gotten stradle of a horse hide & so of corse he wants me 2 be in his show & giv the specktaters there money's worth. A hole lot of the boys will be hear for that okashun so if yu feel like yu wud like 2 git throwed agin they is fensin up sum south texes prary for yu 2 fall on. if yu want 2 ride, cum on down & I will use my influents with tom 2 git yu a horse.

well old horsefly I hav got 2 rite 2 mi gerl & will sea yu later.

paul peebles, psg., etc.

Argentine Mines Bureau Will Explore Patagonia

Washington, D. C., Feb. 25.—A decree suspending the application of the Argentine mining code to three large areas in Patagonia and refusing the application of petroleum exploration rights to individuals within those areas was issued by the Argentine Minister of Agriculture on January 9, according to a report just received by the Petroleum Division of the Department of Commerce.

It is reported the Argentine bureau of mines intends to make its own explorations within these designated areas and to hold them in reserve until such time as a new petroleum law is passed.

P. & R. Corporation to Have New Manager for Pipe Lines

Casper, Wyo., Feb. 27.—Daniel Freel, who for the past year has been superintendent of Producers and Refiners Corporation, recently left for Denver, Colorado, where he is to take up the position as head of the pipe line department, with headquarters in Denver.

Two New Oil Field Specialties

Montgomery Spring Casing Hook

This patented hook SAVES CASING THREADS, the spring lifting the pipe gently but positively when unscrewed.

Being convertible at will from (1) a double-swiveling spring hook, to (2) a non-swiveling spring hook, or (3) a non-rotating rigid hook—the Montgomery is an all-purpose hook and a money-saver. It attaches direct to the casing block bail, so that no "C" Hook is required.

The Montgomery is the strongest casing hook ever made, and is highly perfected in every detail. It swivels with utmost freedom on cone bearings, these bearings, together with the piston and spring, operating in a completely enclosed chamber in an oil bath. A piston ring at bottom, and packing around the piston rod at top serve to retain the oil indefinitely and to render the mechanism dust proof. Springs are entirely of special steel, and very strong and durable.

Has safety latch. Is gracefully designed, with no obstructions to entangle lines or knock off tubing boards.

Montgomery Flexible Drill Pipe Slips

The Montgomery Drill Pipe Slip represents a needed improvement, providing for the first time a flexible slip which will take care of irregularities in the pipe.

It is made extra long, presents more gripping surface to the pipe than any other, and will hold the heaviest, longest strings without damage to the pipe.

Slip sectors are drop forgings of chrome alloy steel. Not a casting is used throughout. Faces only of slip sectors are hardened, to depth of wickers. This leaves the body of the slip tough and practically unbreakable. Handles are long and roomy, for two-handed use.

All sizes—6", 5½", 4", 3" and 2½"—can be used within the table bushings of popular makes of rotaries, without adapters. Ask for descriptive booklets.

The Titusville Forge Company
Titusville, Pa.

Affiliated Companies for Distribution

THE CONTINENTAL SUPPLY COMPANY, ST. LOUIS, U. S. A.
In Mid-Continent, Eastern, Western and Coastal Fields.

THE REPUBLIC SUPPLY COMPANY OF CALIFORNIA, LOS ANGELES, CAL.
In California

CONTINENTAL WELL SUPPLY CO., INC., 2 RECTOR ST., NEW YORK, N. Y.
For Export

STEEL SUPERIOR DERRICK

One of the Distinctive Features of Superior Steel Derricks

The Sleeve and Pilot Pin Joint

The joint is made up of a heavy steel sleeve casting which is permanently attached to the upper end of the leg section and a steel pilot pin casting which is pressed into the lower end of each leg section.

Both of these casting are designed with two lugs at the center, the lugs on the pilot pin fitting in between the lugs on the inside of the sleeve casting. Thus the ends of each section of pipe are reinforced both inside and outside, precluding any possibility of crushing or fracture of the pipe at the ends.

The locking feature obtained by the combination of lugs on the pilot pin and in the sleeve prevents the twisting of the leg members at the joints, and also insures perfect alignment of the leg sections.

The joint is stronger than the pipe from which the legs are made and any possibility of bending is therefore eliminated.

Ask the Driller Who Has Used One

SUPERIOR TUBE COMPANY

STEEL DERRICKS CASING TUBING LINE PIPE

KANSAS CITY, MO.

PITTSBURGH TULSA ST. LOUIS DALLAS CASPER

Say you saw it in The Oil Weekly

SQUEAKS from the BULL WHEEL

Not Technical

George: What, Henry, out of a job again?

Henry: Yes. I had to resign. They set me to push a wheelbarrow, and what do I know about machinery?

Animated

Stage Hand (to manager): Shall I lower the curtain, sir? One of the livin' statues has the hiccups!

Sweet Fair Usher (pouting lips): "Do you want two?"

Male Movie Fan: "Will you let me?"—Puppet.

Yea, Twerily

Lovey: "Beauty is only skin deep, remember."

Dovey: "Yes, and it is not always knee-high."

Willie: "What is an affinity?"

Mother: "It's a woman who will cook a man's goose but not his dinner."

Be Specific

"What are you doing now, Abe?"

"Cleanin' out a bank."

"President, cashier, bookkeeper, burglar, or janitor?"

Nix on the Petting Parties

A young man and his girl were sitting one cold January night in their Lizzie up in Highland Park. The young man said: "I think that I had better drain the radiator as it might freeze."

So suiting action to his words he opened the drain valve and the water began to trickle down the hill. The water on its way passed a clump of bushes. When the water reached the bushes a gruff voice was heard.

"Hey! Dammit, quit throwing water down here!"

"Please don't swear," said the man in the car, "I have a chicken here with me."

"Well, what the 'ell do you suppose I have down here, a duck?"—Pittsburgh Bulletin.

Safety First

Dorcas: Do you ever allow a man to kiss you when you're out motoring with him?

Philippa: Never. If a man can drive safely while kissing me he's not giving the kiss the attention it deserves. — Edgar Guest.

"Have you forgotten that $5 you owe me?"

"By no means. Didn't you see me try to dodge into that doorway?"—Boston Transcript.

A Letter from Trinidad

"I am enclosing a photo of myself and L. P. (Doc) Standifer and one of Standifer's ancestors we found near the well Standifer was drilling here, writes L. A. Bell, who is down in Morne L'Enfer Forest Reserve, near Fyzabad, Trinidad, with the Trinidad Leaseholds, Limited. "There were seven of these big red monkeys, known as the 'red howler', up a tree near the well," the letter continues, "and I killed this one with a revolver. He measures four feet from the end of his tail to his nose. These animals are very numerous here, as are large snakes of the boa constrictor species. One of these snakes measuring 13 feet, was killed near one of our new wells.

"I am well pleased with this place and the people with whom I am working. I have with me five American drillers and we are all in good health and well pleased with conditions.

"Of course I get the 'Weekly' so that I can keep in touch with the happenings at home. I look forward to its arrival each week with much pleasure. We hope to pay a visit to Texas some time this year and renew acquaintances with all our friends."

Couldn't Fool Him

At the Aberdeen railway station a young traveler, carefully producing a £5 note, said: "Third single to London."

Booking Clerk: "Change at Stirling."

"Na, na, I'll ha'e ma change noo."

The hour-glass was made thin in the middle to show the waste of time!

Repairs

A Negro woman of mammoth proportions and inky complexion was in an automobile accident. She was transported to the hospital, where she soon regained consciousness. The doctor, seeking to comfort her a bit, said to her:

"You will undoubtedly be able to obtain a considerable amount of damages, Mrs. Johnson."

"Damages!" said Mrs. Johnson. What Ah want wif damages? Ah got enough damages now. What Ah wants is repairs."—Everybody's.

His Secret Meaning

"I thought your wife's name was Elizabeth?"

"So it is."

"Then why do you call her Peg?"

"Short for Pegasus."

"What has that to do with it?"

"Why, Pegasus is an immortal steed."

"What of that?"

"Sh! Not so loud! She's in the next room. You see, an immortal steed is an everlasting nag, so there you are!"

A Jail Preventive

"You can say what you want about jazz music, but it has kept lots of people out of jail."

"How come?"

"Well, if it wasn't for the music they'd be arrested."

At the Top

That's where the lubricating bowl of a stuffing box should be to prevent packing from burning out when oil is coming to top, or between heads, and that's where it is on the

D & B
Simplex Stuffing Box

In addition its simplicity and ease of operation commend it to your use.

D & B Pump & Supply Company

301 W. Ave 26, Los Angeles, Calif.
Factory Branch:
P. O. Box 1033, Dallas, Texas

You Don't Have to Worry About Corroding—When You Use a—

"LAYNE"

Patent Keystone Wire-Wrapped

STRAINER

This feature assures a continuous, steady production as long as the supply exists. The screening inlet area is greater. Keystone wire is accurately wound by patented winding machine—and accurately spaced, by means of lugs punched on wire.

"Remember We Make Your Emergency Our Emergency"

Wire, Write, Phone your Strainer needs to →

The Layne & Bowler Company

Factories:
Memphis, Tenn.

Houston, Texas

There is no better packer than the Layne Patent Lead Cone and Canvas Ratchet Packer

Say you saw it in The Oil Weekly

GUIDE FOR PURCHASERS

Air Compressors—
Southern Engine & Pump Co.

Air Lift Pumping Equipment—
Sullivan Machinery Co.

Attorneys—
Hjrsch & Hannay
Vinson, Elkins & Wood

Balls and Seats—
Bradford Motor Works
The Chas. N. Hough Mfg. Co.

Band Wheels—
Lee C. Moore & Co., Inc.

Banks—
Exchange Banks of Tulsa
Commercial National Bank

Belting—
Bridgeport Machinery Co.
Continental Supply Co.
D. F. Connolly Agency
Frick-Reid Supply Co.
Oil Well Supply Co.
Republic Supply Co.

Boilers—
Bridgeport Machine Co.
The Brownell Co.
D. F. Connolly Agency
Continental Supply Co.
Frick-Reid Supply Co.
International Supply Co.
The National Supply Cos.
Oil Well Supply Co.
Republic Supply Company
Regan Forge & Engineering Co.
Titusville Iron Works Co.
United Iron Works, Inc.
See Oil Field Supplies and Tanks

Blowout Preventer—
Cameron Iron Works
Regan Forge & Engineering Co.

Burners—
Gaso Pump & Burner Mfg. Co.
Gould Burner Co.
Regan Forge & Engineering Co.

Bull Wheels—
International Derrick & Equipment Co.
Lee C. Moore & Co., Inc.
Tulsa Rig Reel & Mfg. Co.

Calf Wheels—
Lee C. Moore & Co., Inc.

Casing—
David L. Schofield
Oil Field Salvage Co.
Regan Forge & Engineering Co.
Republic Supply Company
Superior Tube Co.

Casing Shoes—
Baker Casing Shoe Co.
Bridgeport Machine Co.
Continental Supply Co.
Gulf Coast Machine & Supply Co.
The National Supply Cos.
Pelican Well Tool & Supply Co.
Regan Forge & Engineering Co.
Republic Supply Company
W-K-M Co.

Cement Hardener—
The Sullivan Co.
W-K-M Co.

Compressors—
Butler Mfg. Co.
F. W. Heitmann Co.
Hope Engineering Co.
Sullivan Machinery Co.
United Iron Works, Inc.

Core Drills—
Elliott Core Drilling Co.

Cordage—
D. F. Connolly Agency
Continental Supply Co.
The National Supply Cos.
Republic Supply Company

Crown Blocks—
American Well & Pros. Co.
Boykin Machinery & Sup. Co.
Gulf Coast Machine & Supply Co.
International Derrick & Equipment Co.
Lufkin Foundry & Machine Co.
Oil City Iron Works, Inc.
Oil Well Supply Co.
Parkersburg Rig & Reel Co.
Superior Tube Co.

Couplings—
Harrisburg Pipe & Pipe Bending Co.
Superior Tube Co.

Dehydrating Processes—
W. S. Barnickel & Co.
Petroleum Rectifying Co.

Derricks and Rigs—
International Derrick & Equipment Co.
Lee C. Moore & Co.
National Turnbuckle Derrick Co.
Parkersburg Rig & Reel Co.
Peden Iron & Steel Co.

Derricks and Rigs—(Cont.)
Tulsa Rig Reel & Mfg. Co.
Superior Tube Co.

Diamond Core Drills—
Sullivan Machinery Co.

Disc Bits—
Rotary Disc Bit Co.

Ditchers—
Buckeye Traction Ditcher Co.

Draw Works—
American Well & Pros. Co.
Lufkin Foundry & Machine Co.

Drilling Cables—
Bridgeport Machine Co.
D. F. Connolly Agency
Continental Supply Co.
Frick-Reid Supply Co.
F. W. Heitmann Co.
The National Supply Cos.
Peden Iron & Steel Co.
Regan Forge & Engineering Co.
Republic Supply Company
Williamsport Wire Rope Distributing Co.

Drilling Machines—
Bridgeport Machine Co.
Keystone Driller Co.
Parkersburg Rig & Reel Co.

Drill Pipe—
Continental Supply Co.
Frick-Reid Supply Co.
Republic Supply Company
Reading Iron Co.
Standard Seamless Tube Co.
Superior Tube Co.

Drilling Equipment—
American Well & Pros. Co.
Bridgeport Machine Co.
Continental Supply Co.
Republic Supply Company

Drive Pipe—
Republic Supply Company
Reading Iron Co.
Superior Tube Co.

Electrical Equipment—
Southwest Gen. Elec. Co.
Westinghouse Elec. & Mfg. Co.

Elevators—
B. & C. Machine & Fndy. Co.
Bridgeport Machine Co.
Dunn Mfg. Co.
Gulf Coast Machine & Supply Co.
Wilson & Willard Mfg. Co.

Engines, Diesel—
Western Machinery Co.

Engines, Gas—
The Braden Co.
Frick-Reid Supply Co.
Western Machinery Co.

Engines, Oil—
Continental Supply Co.
Frick-Reid Supply Co.
Western Machinery Co.

Engines, Pumping—
Ajax Iron Works
American Well & Pros. Co.
Bessemer Gas Engine Co.
Bridgeport Machine Co.
The Brownell Co.
De La Vergne Machine Co.
Franklin Valveless Engine Co.
Frick-Reid Supply Co.
Hope Engineering Co.
Lucey Mfg. Corp.
Lufkin Foundry & Machine Co.
The National Supply Cos.
National Transit Pump & Machine Co.
Oil Well Supply Co.
Peden Iron & Steel Co.
Republic Supply Company
Rock Island Plow Co.
Southern Engine & Pump Co.
Titusville Iron Works

Engineers—
A. C. Bierman
C. N. Black
Samuel J. Caudill
David Donoghue
Foster & Reiter
F. W. Freeborn Eng. Co.
E. F. Kuehnle
Geo. C. Matson
Lee C. Moore & Co.
Oil Conservation Engineering Co.
L. H. Owen
D. T. Ring
F. N. Williams

Fire Protection—
Foamite-Childs Corporation
Oil Conservation Engineering Co.

Fish Tail Bits—
American Well & Pros. Co.
Frick-Reid Supply Co.
Gulf Coast Machine & Sup. Co.
Lucey Manufacturing Corp.
Pelican Well Tool & Sup. Co.
Regan Forge & Engineering Co.
W-K-M Co.

Floor Circle Brace—
Dunn Mfg. Co.

Fuel Oil—
Gulf Ref. Co.
Sinclair Ref. Co.

Gas Traps—
Trumble Gas Trap Co.

Gasoline Extraction Compressors—
Bessemer Gas Engine Co.
Sullivan Machinery Co.

Gasoline and Oil Storage Tanks—
Butler Mfg. Co.
Graver Corporation
Kansas City Struct. Steel Co.
Parkersburg Rig & Reel Co.

Gauges—
The Foxboro Co., Inc.
Oil Conservation Engineering Co.

Gauge Boards—
The Foxboro Co., Inc.

Genuine Wrought Iron Casing—
Reading Iron Co.
Superior Tube Co.

Geologists—
A. C. Bierman
Samuel J. Caudill
Alexander Deussen
David Donoghue
Edwin B. Hopkins
Foster & Reiter
Geo. C. Matson
Herald Bros.

Grips and Clamps—
J. P. Ratigan
W-K-M Co.

Heat Exchangers—
Brown Welding & Machine Co.

Hose—
D. F. Connolly Agency

Houses—
Crain Ready-Cut House Co.

Laboratory Equipment—
Fort Worth Laboratories

Lease Equipment—
The Braden Co.

Lighting Systems—
Bridgeport Machine Co.
Westinghouse Elec. & Mfg. Co.

Line Pipe—
Continental Supply Co.
Republic Supply Company
Reading Iron Co.
Superior Tube Co.

Manufacturers—
Robinson Packer Co.

Maps—
Standard Blue Print, Map & Engineering Co.

Meters—
The Foxboro Co., Inc.

Motors—
Southwest Gen. Elec. Co.
Westinghouse Electric & Mfg. Co.

Oil Field Supplies—
American Well & Pros. Co.
B. & C. Machine & Fndy. Co.
The Braden Co.
Bridgeport Machine Co.
Butler Mfg. Co.
D. F. Connolly Agency
Continental Supply Co.
Frick-Reid Supply Co.
Graver Corporation
Gulf Coast Mach. & Sup. Co.
International Supply Co.
Kansas City Struct. Steel Co.
Lee C. Moore & Co.
Lucey Manufacturing Corp.
The National Supply Cos.
Oil Well Supply Co.
Parkersburg Rig & Reel Co.
Peden Iron & Steel Co.
Pelican Well Tool & Sup. Co.
Republic Supply Company
Regan Forge & Engineering Co.
Robinson Packer Co.
H. M. Spence
Superior Tube Co.
Tulsa Rig Reel & Mfg. Co.
United Iron Works, Inc.
W-K-M Co.

Oilwell Casing—
Frick-Reid Supply Co.
Republic Supply Company
Superior Tube Co.
Texas Pipe & Supply Co.

Packers—
The Guiberson Corp.
Layne & Bowler
Robinson Packer Co
Pelican Well Tool & Supply Co.

Packers—(Cont.)
Regan Forge & Engineering Co.
W-K-M Co.
Exner-Dodge Packer Co.

Packing—
D. F. Connolly Agency
Frick-Reid Supply Co.
The National Supply Cos.
Peden Iron & Steel Co.
Pelican Well Tool & Sup. Co.
Republic Supply Company

Paints—
Peden Iron & Steel Co.

Panel Boards—
Westinghouse Electric & Mfg. Co.

Patents—
Hardway & Cathey
Jesse R. Stone

Pipe Grips—
W-K-M Co.

Pipe—
A. M. Byers Co.
Continental Supply Co.
W. E. Detlor
Frick-Reid Supply Co.
F. W. Heitmann Co.
Harrisburg Pipe & Pipe Bending Co.
International Supply Co.
The National Supply Cos.
Oil Well Supply Co.
Peden Iron & Steel Co.
Reading Iron Co.
Republic Supply Company
David L. Schofield
Superior Tube Co.
Standard Seamless Tube Co.
Williamsport Wire Rope Co.

Pipe Screwing Machines—
Buckeye Traction Ditcher Co.

Pipe Wrenches—
Continental Supply Co.
Dunn Mfg. Co.
The Guiberson Corp.
Republic Supply Company

Portable Buildings—
Butler Mfg. Co.
International Derrick & Equipment Co.

Portable Compressors—
Sullivan Machinery Co.

Portable Drillings Rigs—
Bridgeport Machinery Co.
Lee C. Moore & Co.
Oil Well Service Co.
Parkersburg Rig & Reel Co.
The National Supply Cos.

Pulleys—
International Derrick & Equipment Co.
Lee C. Moore & Co.

Pulling Machines—
Clark Machine Co.
Myrick Machine Co.
Safety Pulling Machine Co.

Pumps—
Axelson Machine Co.
American Well & Pros. Co.
Bradford Motor Works
Continental Supply Co.
D. & B. Pump & Sup. Co.
Frick-Reid Supply Co.
Gaso Pump & Burner Mfg. Co.
Lucey Manufacturing Corp.
National Transit Pump & Machine Co.
Oil Well Supply Co.
Pelican Well Tool & Supply Co.
Republic Supply Company
Southern Engine & Pump Co.
Texas Oil Pump Co.
United Iron Works, Inc.

Pumping Powers—
The Braden Co.
Frick-Reid Supply Co.
Kansas City Hay Press Co.
H. M. Spence
Jensen Bros. Mfg. Co.

Refined Products—
Gulf Refining Company
Humble Oil & Refining Co.
Sinclair Refining Co.
Sunshine State Oil & Ref. Co.

Recorders—
Fort Worth Laboratories
The Foxboro Co., Inc.

Refinery Equipment—
Butler Mfg. Co.
Continental Supply Co.
Gardner Governor Co.
Graver Corporation
Kansas City Struct. Steel Co.
Oil Conservation Engineering Co.
Republic Supply Company
Titusville Iron Works
United Iron Works, Inc.
Wyatt Metal & Boiler Works

Books On Petroleum

The knowledge gained through years of work and study by some of the most capable men in the oil industry is set down in the books listed herein. Order some of these books and profit by the experience of others.

(The following is reprinted from our complete catalog of OIL BOOKS, which will be sent free on request. Watch this space from week to week for description of practically every book available on petroleum.)

Oil Land Development and Valuation

By R. P. McLaughlin, Petroleum Engineer and Geologist; formerly State Oil and Gas Inspector of California. The rapidly increasing demand for petroleum has led to more careful methods of mining, aiming to obtain the maximum production. This book covers the steps necessary for the full and proper development of lands which have been determined to be oil-bearing. It describes the precautions that must be applied to the construction and maintenance of wells tapping the original source of supply. It discusses the principles of oil land valuations. The book is based on the author's ten years of practical experience in making geological and engineering investigations of oil lands. It tells the business executive and land owner as well as the petroleum engineer and oil geologist what it pays to know about the details of oil land development. 200 pages, pocket size, flexible, 59 illustrations.

Price, postpaid, net $3.00

Field Mapping for the Oil Geologist

By C. A. Warner, Field Geologist, Empire Gas and Fuel Co., Bartlesville, Okla. Here is a handbook of field methods of value to those geologists who have had little experience with the methods commonly used in a territory not yet drilled. It gives the reader a general knowledge of the principles, laying foundation upon which detailed work in any particular area can be carried further. It has 143 pages, 4¼x7 inches, and contains 38 figures. It is flexibly bound.

Price, postpaid, net $2.50 (17s 6d)

Handbook of Natural Gas

By Henry P. Westcott Carefully revised with over 200 pages of new material and 100 new cuts. 640 pages, 230 illustrations, 200 tables, pocket size—4½x7¾. Special articles featuring: Volcanic Origin of Natural Gas and Oil, Geology of the Mid-Continent Oil and Gas Field, Tests to Determine Poisonous Gases in Natural Gas, Orifice Meters, Electrolytic Mitigating Systems.

Price, postpaid, Cloth, $3.75. Leather.....$4.50

Lubrication and Lubricants

By Archbutt and Deeley. A treatise on the theory and practice of lubrication and on the native properties and testing of lubricants. Fourth Edition 1911.

Price, postpaid $10.00

Send us your order NOW

THE GULF PUBLISHING CO.

P. O. Box 1307, Houston, Texas

GUIDE FOR PURCHASERS—Continued

Rig Irons—
International Supply Co.
Lee C. Moore & Co.
Oil Well Supply Co.
Parkersburg Rig & Reel Co.
Republic Supply Company

Rotary Rock Bits—
Hughes Tool Co.

Rotary Fish Tail Bits—
Continental Supply Co.
Pelican Well Tool & Supply Co.
Regan Forge & Engineering Co.
Republic Supply Company
W-K-M Co.

Rubber Fillers—
National Rubber Filler Co.

Sectional Steel Buildings—
The Braden Co.

Separators—
Butler Mfg. Co.
Trumble Gas Trap Co.

Strainers—
Layne & Bowler Co.
Pelican Well Tool & Supply Co.

Structural Steel—
Butler Mfg. Co.
Kansas City Struct. Steel Co.
Pennsylvania Tank Car Co.
United Iron Works, Inc.

Steel Derricks—
International Derrick & Equipment Co.
Lee C. Moore & Co., Inc.
Superior Tube Co.

Steel Crown Blocks—
Gulf Coast Mach. & Supply Co.
Lee C. Moore & Co.
Parkersburg Rig & Reel Co.
Superior Tube Co.

Steel Manufacturers—
Colonial Steel Co.

Steel Storage Tanks—
Butler Mfg. Co.
Graver Corporation

Strainers—
J. H. McEvoy & Co.
W-K-M Co.

Sucker Rod Lines—
D. F. Connolly Agency
Continental Supply Co.

Sucker Rods—
Axelson Machine Co.
D. & B. Pump & Sup. Co.
Dunn Mfg. Co.
Frick-Reid Supply Co.
S. M. Jones Co.
The National Supply Cos.
Oil Well Supply Co.
J. P. Ratigan
Republic Supply Company

Sucker Rod Sockets—
Bradford Motor Works
Brown Welding & Machine Co.

Swabs—
B & C Machine & Foundry Co.

Tank Cars—
Pennsylvania Tank Car Co.

Tanks—
Butler Mfg. Co.
Black, Sivalls & Bryson
The Brownell Co.
Gantz Tank Co.
Graver Corporation
Kansas City Struct. Steel Co.
Maloney Tank Co.
Columbia Steel Tank Co.
Parkersburg Rig & Reel Co.
Petroleum Iron Works
United Iron Works Co.
Wyatt Metal & Boiler Works

Tank Equipment—
Oil Conservation Engineering Co.

Tank Gauge Engineer—
L. M. Hall

Tret-O-Lite—
W. S. Barnickel & Co.

Thermometers—
Fort Worth Laboratories
The Foxboro Co., Inc.

Tongs—
Bridgeport Machine Co.
Dunn Mfg. Co.
Guiberson Corp.
Pelican Well Tool & Supply Co.
Wilson & Willard Mfg. Co.
W-K-M Co.

Tool Joints—
American Well & Prod. Co.
Boykin Machinery & Sup. Co.
Bridgeport Machine Co.
Continental Supply Co.
Hughes Tool Co.

Tool Joints—(Cont.)
Pelican Well Tool & Sup. Co.
Regan Forge & Engineering Co.
Republic Supply Co.
W-K-M Co.

Tools (Fishing and Drilling)—
Bridgeport Machine Co.
Brown Welding & Machine Co.
Frick-Reid Supply Co.
Hughes Tool Co.
International Supply Co.
Oil Well Supply Co.
Peden Iron & Steel Co.
Pelican Well Tool & Supply Co.
Regan Forge & Engineering Co.
Republic Supply Company
Sullivan Machinery Co.
W-K-M Co.

Tractor Winch—
Rock Island Plow Co.
Tulsa Rig Reel & Mfg. Co.

Traveling Blocks—
American Well & Prod. Co.
Boykin Machinery & Sup. Co.
Gulf Coast Machine & Supply Co.
Lufkin Foundry & Machine Co.
Regan Forge & Engineering Co.

Tubing Catcher—
Dunn Mfg. Co.
Guiberson Corp.

Tubing Lines—
D. F. Connolly Agency

Tubing—
Republic Supply Company
Reading Iron Co.
Standard Seamless Tube Co.
Superior Tube Co.

Underreamers—
American Well & Prod. Co.
Bridgeport Machine Co.
Wilson & Willard Mfg. Co.

Vacuum Pumps—
Sullivan Machinery Co.

Valves—
Bradford Motor Works
Darling Valve & Mfg. Co.
The Charles N. Hough Mfg. Co.
Texas Oil Pump Co.
Ludlow Valve Mfg. Co.
Oil Conservation Engineering Co.
Pratt & Cady
Reading Steel Casting Co.
Reading Valve & Fittings Co.
Westcott Valve Mfg. Co.
W-K-M Co.

Valves and Fittings—
Continental Supply Co.
Darling Valve & Mfg. Co.
D & B Pump & Sup. Co.
F. W. Heitmann Co.
Ludlow Valve Mfg. Co.
Lufkin Foundry & Machine Co.
The National Supply Cos.
Peden Iron & Steel Co.
Pratt & Cady
Republic Supply Company
Reading Steel Casting Co.
Reading Valve & Fittings Co.
United Iron Works
W-K-M Co.

Walking Beams—
International Derrick & Equipment Co.
Lee C. Moore & Co., Inc.

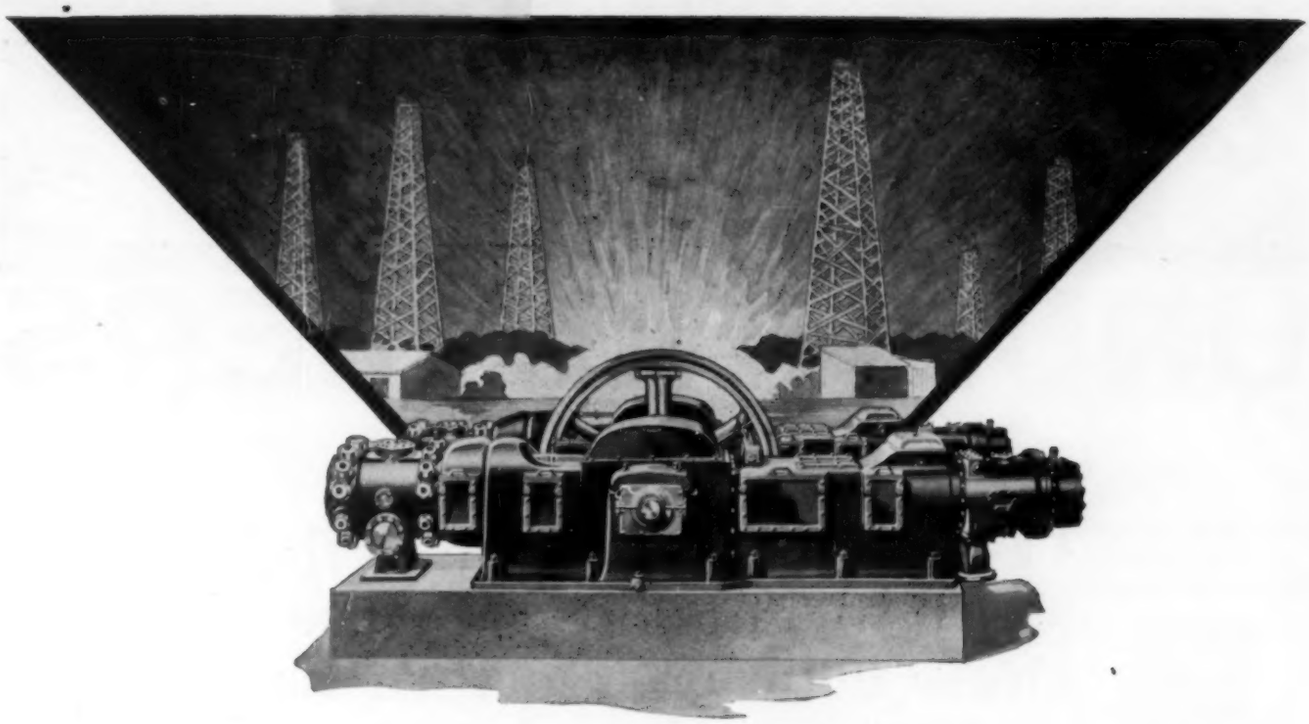
Welding and Cutting Equipment—
Imperial Brass Mfg. Co.

Working Barrels—
Axelson Machine Co.
Bradford Motor Works
Continental Supply Co.
D & B Pump & Sup. Co.
Republic Supply Company
The Charles N. Hough Mfg. Co.
Texas Oil Pump Co.
McGregor Working Barrel Co.

Water Gauges—
F. W. Heitmann Co.

Water Cans—
H. P. Gott Mfg. Co.

Wire Rope—
Bridgeport Machine Co.
D. F. Connolly Agency
Continental Supply Co.
Houston Oil Field Material Co
International Supply Co.
Regan Forge & Engineering Co.
Republic Supply Company
The National Supply Cos.
Williamsport Wire Rope Distributing Co.



The Test of the Years

Thousands of installations, operating under every conceivable condition, are visible proofs of the practicality of Bessemer Oil Field Equipment.

Out in the oil fields, where the knocks of service are hardest, batteries of Bessemers are pounding out 99% operating records—month after month, year after year. This limitless dependability has enabled Bessemer to maintain an undisputed leadership for over a quarter century.

What can be more convincing testimony of their correctness in engineering principles, quality of materials and skill in manufacture?

Time proves that "You Buy the Best When You Buy the Bessemer."

THE BESSEMER GAS ENGINE COMPANY
62 York Street Grove City, Pa.

BESSEMER

BESSEMER OIL FIELD ENGINES – COMPRESSORS VACUUM PUMPS – ROLLER PUMPING POWERS

BRIDGEPORT BRIDGEPORT BRIDGEPORT

SWAN UNDERREAMERS

THEY are supreme in their field not only because of their ability to go thru hard rock, or the fact that they always make a perfect shoulder for the casing to rest upon, but on account of many other points of superiority.

Swan Underreamers last longer, cost no more, and give more service.

Distributed universally for sale or rent by the Continental Supply Co., Leidecker Tool Co., Drillers Supply Co., and the Bridgeport Branches.

THE BRIDGEPORT MACHINE COMPANY

General Offices & Works WICHITA, KANSAS

Rising Star, Texas	Depew, Okla.	Augusta, Kans.
Ft. Worth, Texas	Sayre, Okla.	El Dorado, Kans.
Ranger, Texas	Wewoka, Okla.	Madison, Kans.
Breckenridge, Texas	Tulsa, Okla.	Marietta, Okla.
South Bend, Texas	Wetumka, Okla.	Shidler, Okla.
Tonkawa, Okla.	Florence, Kans.	Stroud, Okla.

BRIDGEPORT BRIDGEPORT BRIDGEPORT